











MASARYK UNIVERSITY ANNUAL ACTIVITY REPORT

2016

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- **12.9** Faculty of Sports Studies
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Foreword

For Masaryk University - and for Czech higher education as such - 2016 brought about significant changes in legislation: after a decade of debate on Czech higher education reform, an amended Higher Education Act was finally approved by the Parliament of the Czech Republic. However, while the original ambitious reform plans called for comprehensive changes to university management, human resources management and quality assurance processes, implemented changes were in fact limited to degree programme accreditation overhaul. Nevertheless, this achievement is not at all insignificant - the dysfunctional nature of the existing system has been amply demonstrated both by past scandals taking place at universities awarding cheap titles and by the low confidence of the academic community in the transparency of the decision-making processes administered by the accreditation body. The amended Act has brought the Czech accreditation system up to par with European standards and practices, added safeguards and corrective mechanisms and paved the way for a wide range of experts to participate in degree programme evaluation. Above all, it has highlighted the responsibility of individual universities for the quality of their work.

With respect to Masaryk University, these changes to the external legislative environment have allowed us to finalize a long-prepared internal quality assurance system. After much discussion, the new Masaryk University Statutes were approved by the Academic Senate in the second half of 2016; this document now codifies a number of changes in the structure and division of powers held by top university management bodies. Newly added components include the Internal Evaluation Board, a body tasked with degree programme evaluation and creative activity assessment which also plays the role of internal accreditation authority responsible for approving new degree programmes and extending existing accreditations. It also co-ordinates the critical self-evaluation process

of individual degree programmes which lies at the heart of our internal quality improvement system. The establishment of the International Scientific Advisory Board is designed to help improve the level of scientific activity conducted at the university and to provide an external view of university research.

In view of the continued stagnation of state budget funding and an outage of European funding caused by government delays in operational programme preparation, I believe that the significant advances in the internationalization of the university's internal environment achieved in 2016 deserve all the more recognition. Many faculties have begun to systematically support the employment of foreign workers while consensus on budgetary rules has stimulated the writing of diploma and dissertation theses in foreign languages throughout the university. Clearly documented improvements in the university's research performance constitute a similarly positive phenomenon. Despite difficult financial conditions, we have managed to meet all research capacity sustainability commitments previously established thanks to structural funds. In an atmosphere of superficial criticism decrying the implementation of European projects as "pouring money into concrete", the university serves as an example of well-managed research infrastructure investment, reflected by the arrival of foreign researchers and the grow $ing\ international\ competitiveness\ of\ our\ research.$

I would therefore like to thank all of my colleagues who participated in the successes achieved by Masaryk University in 2016 and I sincerely believe that the opportunities opened up by recent changes in both external and university legislation will help us enhance the quality and attractiveness of our university studies in the years to come.

Mikuláš Bek

Rector



Masaryk University's Mission, Values and Vision

Masaryk University strives to create and disseminate knowledge, thus enhancing the quality of life and fostering cultural growth in the community. This mission stems from the university's founding values.

Our Values

Since its founding following the establishment of the Czechoslovak Republic, Masaryk University has always respected and professed values reflecting the republican and democratic ethos of that initial period. To this day, such values form the basis of its internal culture and are widely embraced by the academic community. These values are:

- → Freedom, respected and defended as the governing principle of the inner workings of the university in terms of the academic freedom of teaching and research, freedoms such as a students' right to design their own curricula, freedom as the principle of institutional autonomy exercised by the university towards the state, and last but not least freedom as a social imperative.
- → Respect for rules ensuring equal opportunities and transparency regarding the functioning of the institution, as manifested e.g. by internal administrative and economic settings, study-related regulations and the war on plagiarism.
- → Responsibility, comprising the university's public role, as exemplified by its function with respect to the creation of public opinion and active participation in public debate as well as its significance as knowledge and technology transfer mediator and public service provider and its position as a university which welcomes both disadvantaged students and members of various minorities. In terms of an inwardly-oriented approach, individual responsibility for the choice and structuring of one's own curriculum forms the basis for the functioning of an open and autonomous study environment.

Our Vision

By 2020, Masaryk University will be:

- → a university with a better position among world universities, measured using quality and performance indicators in international rankings,
- → a respected research university boasting internationally renowned research teams, clearly defined priorities and interdisciplinary research topics,
- a university offering a valuable higher education based on a stable and universal foundation comprised of both social and natural sciences,
- → a university whose comprehensive offer of education reflects technological developments and changes, a university which is thus perceived as a leader in Czech higher education
- a university which functions as a role model in both national and international contexts with respect to facilitating access to educational opportunities for all applicants exhibiting the required learning potential regardless of disabilities and social or other impairments,
- an employer providing all employees with a motivating work environment which inherently stimulates a responsible, efficient, creative and ethical approach
- → a strategic partner for representatives of institutions at all levels of the educational system, research institutions, commercial and public subjects and medical and special-interest organizations, as well as an active participant in the development of cultural, artistic and sports activities in the region,
- → an inspiring community with a strong voice in the development of national policies and strategies as well as society-wide and regional issues,
- a strong and open-minded academic community with a comprehensive common internal culture based on clearly defined values and a consensual approach.



Strategic Priority:

Degree Programme Diversification and Accessibility



1.1

Bachelor's Studies
Admission Procedure

1.2

Activities for Applicants and Cooperation with Schools

1.3

Counselling Services for Applicants and Recently Enrolled Students

1.4

Study Offer and Field of Study Information

1.5

Lifelong Learning

Bachelor's Studies Admission Procedure

Since 2003 Masaryk University has employed its own centralized entrance examination format, known as the **Learning Potential Test** (LPT). In 2016, the LPT consisted of six subtests focusing on specific skills applicable to varying degrees to studies in a given field. A total time limit of **100 minutes** applies to the entire test.

A dedicated e-learning LPT training course as well as all previous tests are available free of charge on the university's website to allow prospective students to **prepare for entrance examinations** regardless of their financial situation or location. Further training courses on offer include sports training tailored to the requirements of entrance examinations at FSpS, mock entrance examinations for Bachelor's studies applicants for English Language and Literature at FA and preparatory courses designed for the prospective students of degree programmes taught in English at FMed.

The Faculty of Social Studies, which has been using Scio tests for a number of years, has made it possible for applicants to **choose between LPT and Scio tests** for the first time in 2016. Almost half of all applicants took advantage of the opportunity and opted for LPT, which has the distinct advantage of being the universally accepted entrance examination format for all MU faculties.

In 2016, the Faculty of Science decided to implement a different kind of approach, offering prospective students the option to either choose between LPT and a **field-specific test** or to take both and then choose the more successful result. Over 50 % of all applicants chose to take both and this group subsequently exhibited the highest enrolment rate. The field-specific test option was selected by only 8 % of prospective students.

The Faculty of Medicine, which does not use the LPT, continued to **test applicants' knowledge in key areas** such as biology, chemistry and physics.

Certain faculties also attract talented applicants by admitting them without entrance examinations and instead taking into account either their **excellent secondary school results**, explicit interest in the field documented by **Secondary School Scientific Activity**, national benchmarking achievements or high IQ results certified by Mensa.

In the 2016/2017 academic year admission procedure a total of **41,747** Bachelor's and long-cycle Master's entrance applications and **10,882** Master's applications were submitted.

The university's intention to obtain a **reflection of its current position** on the university market and to **map a generation** of prospective Masaryk University students led to the implementation of both internally and external-

ly conducted **surveys** among secondary school students and young people under 25 years of age.

MU itself implemented two completely new surveys in 2016. The aim of a survey specifically designed to assess the image of MU as perceived by Czech and Slovak secondary school students was to establish which criteria are crucial for applicants in the process of choosing a university and selecting a field of study and how they view Masaryk University. Prospective university students, i.e. Czech and Slovak secondary school students, were surveyed in grades 3 and 4. The survey mapped the views of 778 students from the Czech Republic and 318 students from Slovakia.

In 2016, Masaryk University also conducted a **survey among applicants who had submitted an entrance application at MU**. The survey, which included 4,669 respondents, was designed to establish how individual applicants perceive Masaryk University as a whole and how they see it in comparison with other universities in the Czech Republic. In addition, the survey focused on applicants' attitudes to various admission procedure formats, university selection and overall feelings associated with their upcoming university studies. Applicants were also asked to answer whether – and, if so, what kind – of Czech or Slovak university advertising campaign they had noticed.

Activities for Applicants and Cooperation with Schools

In 2016 Masaryk University implemented a wide range of activities specifically targeting secondary schools and potential applicants. Traditional **lectures on studies at MU were held at secondary schools** in the Czech Republic and Slovakia. MU students discussed their own studies and passed on experiences from the university environment to secondary school students while introducing the MU study offer and entrance examinations. They visited over **75 Czech and Slovak secondary schools**.

MU teachers and scientists also visited a number of partner secondary schools. Thanks to these visits, students were able to experience real university lectures from the comfort of their classrooms. The following topics are some of the many introduced: Research Life at the Czech Antarctic Base, The Second Life of Literary Works, The Story of Cancer – The History of Chemotherapy, How the State Budget Works, Obesity – Prevention and Treatment and The European Union and the Refugee Crisis. Altogether, over 40 lectures were held at partner secondary schools, which also indicated a great deal of interest in such activities in the future.

Meeting with educational advisers from partner secondary schools held in 2016 further facilitated the sharing of ideas and the development of collaborative activities. The MU Career Centre prepared a programme focusing on Work with the Client, Counselling Methods, Job Market and Relaxation Methods. The meeting also provided educational advisers with information about newly implemented features in the MU admission procedure and study offer.

Throughout the year Masaryk University implemented a number of information activities for applicants for degree programmes taught in Czech. The university's new presentation was unveiled at **educational fairs** in Prague, Brno and Bratislava. While a **university-wide open day** was held for applicants from the Czech Republic and Slovakia in September, individual faculties also organized their own **field-specific events** and open days for secondary school students throughout the year.

Regular information may also be found at **facebook. com/StudujNaMuni**, in monthly **newsletters** and in the online magazine at **studujnamuni.cz**. Important information for applicants is also provided in a special magazine issue entitled *Studuj na Muni* and other printed matter. All nine faculties also published separate electronic newsletters detailing study opportunities in order to inform and motivate admitted applicants to enrol in studies.

The university took on the role of **co-organizer** of the nationwide secondary school tic-tac-toe competition **pIšQworky**, with the finals held at the MU campus.

Contact with elementary and secondary school students is being developed thanks to the unique **Bioskop science education centre**, a facility dedicated to promoting science through interactive activities and playful tasks in a modern laboratory setting. The Bioskop visitor centre is located in the immediate vicinity of MU's best research institutes at the University Campus Bohunice. The scope and duration of tasks are tailored to individual age categories: 6–11, 12–15 and over 16 years of age. The centre organizes spring courses and summer schools as well as **courses in English**. A total of **1,777 participants** took part in **98** Bioskop-organized events in 2016.

The second annual Masaryk jUniversity has also garnered significant interest, with almost 100% of its participants successfully completing the entire run. Of the 170 enrolled 9- to 14-year-olds, 166 were successful and went on to attend a graduation ceremony in University Cinema Scala in June 2016 where they were presented with their very first university diplomas. Eight MU faculties and three specialized university units contributed to the preparation of lectures, workshops and excursions.

Secondary school students are also provided with opportunities to participate in university life within the framework of various seminars, courses and competitions held at individual MU faculties. For example, the Faculty of Economics and Administration held the Economic Brain Seminar competition and even provided them with the opportunity to participate in regular educational activities thanks to the Touch Econ project, designed to allow secondary school students to attend lectures and seminars as regular students. As part of both of these activities, the most successful participants are granted free admission to FEA. In cooperation with student associations, FEA participated in the organization of a nationwide presentation skills competition for teams of two to three elementary and secondary school students from the Czech Republic and Slovakia.

The Faculty of Informatics also held several competitions for secondary school student teams, including InterLOS, an internet logic competition, as well as programming courses focusing on Android and Python. The faculty has launched collaborations with five selected Brno grammar schools which it provides with extracurricular activity and lecture guidance as well as offering courses to many of its gifted students. Talented secondary school students may also participate in one-off special-purpose weekend events or take part in a week-long workshop.

Workshops targeting secondary school students are also part of the traditional **Multimedia Day** organized by

Counselling Services for Applicants and Recently Enrolled Students

the **Faculty of Social Studies**. Every year since 2009, the faculty welcomes students interested in peeking behind the scenes of the world of media, introducing the work of journalists as well as media production in a highly interactive way.

A wide range of activities for both elementary and secondary school students are also implemented by the Faculty of Science. In addition to excursions to multidisciplinary workplaces (e.g. Chemistry Days or Physics Workshop), the faculty regularly organizes correspondence seminars such as ViBuCh, a training course for future chemists, or BrKoS, the Brno mathematics correspondence seminar. For students of primary schools, the faculty holds a popular physics-themed summer camp (ÚLeT) as well as the Brno logic game (BrLoH), attended by 1,500 participants. Throughout the school year, primary and secondary school students are invited to take part in a mathematical competition (KoMáR), followed by weekend training sessions where secondary school students are tasked with preparing lectures for primary school pupils. The KrTeK creative technical circle, designed specifically for primary school students, provides a platform for the students of teacher training in physics.

Far from focusing only on students and pupils, activities which form part of collaborations with primary and secondary schools also target their teachers. A good example of such activities is the **Physics Café**, a regular professional and social meeting which provides mutual support and inspiration for physics teachers at all education levels.

The Faculty of Sports Studies cooperates with elementary and secondary schools as part of the **Children's Satisfaction** project, aimed at enhancing teachers' competencies in the area of safety and accident prevention.

Cooperation between primary and lower secondary schools and future educators is also a key consideration; as a result, the Faculty of Education has developed a new **primary and secondary school partnership system** with three versions of partner institution status: collaborating schools or facilities, faculty schools or facilities and clinical schools or facilities – each status thus corresponds to a specific type of collaboration.

Advisory services for students focus primarily on students' rights and obligations, including by implementing Safe Studies lectures at the beginning of the academic year. First year students are provided with the annually published *Prvákoviny* information brochure, issued for the thirteenth time in 2016. Furthermore, a two-day **Prvákoviny seminar** held in September provides newly admitted students with an opportunity to meet their more experienced older colleagues, examine the faculty environment, get to know the Information System and explore the city of Brno.

Individual psychological consultations have a long tradition at the university. They strive to help students at risk of study failure to increase their learning success through active counselling throughout the course of their studies. Consultations are offered by qualified psychologists with extensive self-experience training and all advisory services are governed by a code of ethics applicable to university advisory personnel.

Thanks to individual psychological consultations, students were able to resolve both study-related and personal issues, including fear of failure, inability to deal with pressure, low self-esteem, inability to study, uncertainty regarding field of study choice, fear of the future, premature termination of studies or fears associated with studies emphasizing independent thought and action. Students who sought individual psychological consultations generally attended 3 to 5 sessions.

The **Student Adviser Initiative** launched in 2007 provides guidance to students in a range of study-related matters, with counselling services often requested in discussion forums within the MU Information System. Student advisers also operate a dedicated IS MU discussion forum where students are free to inquire into specific situations as well as view answers to questions asked by others. Topics most frequently addressed in 2016 include study-related fees, study termination, conditions for study progress and IS MU administration.

A number of other counselling activities for newly admitted students were also provided by faculties and departments as required by the nature of individual fields of study. The Faculty of Science even provides scholarships to experienced students actively involved in helping first-year students.

Study Offer and Field of Study Information

Masaryk University maintains a leading position among Czech universities in the area of **services for applicants and students with disabilities**. The Learning Potential Test as well as National Comparative Tests, used for a majority of admission procedures implemented at MU, constitute a rather demanding tool, especially as they require highly precise sensory perception as well as rapid reading comprehension skills. Since disabilities—unlike intellectual potential—tend to limit performance, Masaryk University puts its twenty years of experience in testing people with disabilities to good use in order to provide disabled persons with suitable and accessible tests.

The supervision of accessible testing is entrusted to the Support Centre for Students with Special Needs (Teiresias Centre), which is tasked with the implementation of three areas of activity:

Providing an accessible learning environment, i.e. while respecting accessibility rules in advance, independently of individual cases. The Teiresias Centre guarantees the availability of physical and virtual spaces, universal access to documents and accessible forms of both in-person and electronic communication, including communication in Czech sign language for both general and teaching-specific purposes.

Advocating an active policy with respect to people with disabilities brings MU in contact with a number of both inclusive and special secondary schools. The Teiresias Centre provides selected inclusive education services at these schools while also ensuring the accessibility of final state examinations at secondary schools for the Centre for the Evaluation of Education Results (Cermat) and supervising the accessibility of National Comparative Examinations for the Scio company. Persons with disabilities are offered Teiresias Centre-organized courses focusing on acquiring compensatory skills and experience with technologies necessary for mastering entrance examinations.

Providing individually tailored testing without altering test content; in 2016 the Teiresias Centre offered the learning potential test on 24 specific occasions and in various formats including for the blind, visually impaired, deaf and hearing impaired persons. A total of 297 people requested services in connection with their disabilities and subsequently participated in individually tailored entrance examinations in 2016: 242 persons submitted a total of 431 applications for Bachelor's and long-cycle Master's studies (of which 104 were successful); 44 persons submitted a total of 61 applications for Master's studies (of which 25 were successful) and 6 applicants were admitted to doctoral studies.

Masaryk University's study offer expanded to include a new Bachelor's field of study entitled International Relations and European Politics, implemented by the Faculty of Social Studies for applicants interested in politics and international affairs. The field of study includes courses on political science, international relations theory and a number of optional courses on international security, European studies, international political economy, human rights issues and energy security. Fields newly accredited in English include Conflict and Democracy Studies, a Master's field of study which focuses on the potential relationships between democracy (and its quality) and authoritarianism and on totalitarian regimes and conflicts. The Public Policy and Human Resources Master's field of study is specifically designed for students interested in public policy, social systems and the job market and human resources and public administration. As a result of the global political situation, the faculty is aware of increased interest in studies focusing on international security and politics.

The Faculty of Economics and Administration admitted the first batch of students into the newly launched Public Economics and Administration degree programme. This Master's degree programme is implemented in collaboration with the University of Eastern Piedmont in Alessandria

The non-medical field of **Nursing** was added to the existing list of English-language accreditations at the Faculty of Medicine.

The Faculty of Science now offers **Biophysical Chemistry**, an interdisciplinary Master's field of study within the Chemistry programme. The field provides students with general knowledge integrating chemistry, physics and biology while also presenting physical chemistry in applied areas associated with medicine, pharmacy and the environment.

The Faculty of Sports Studies opened the newly accredited the **Physical Trainer** Master's field of study in both full-time and combined study mode. The aim of the two-year-long Master's degree programme is to prepare qualified experts capable of providing management and counselling services in the area of fitness training and physical activity planning and management for the general population.

In 2016 all faculties actively participated in a Masaryk University internal project designed to **revise field of study information.** The project aimed to revise the structure of information about individual fields in order to improve the presentation, transparency and updating of relevant data, an effort directly associated with the

Lifelong Learning

university's dedication to continuously improving field of study quality. The project simultaneously fulfils conditions established by the amended Higher Education Act and even takes into account degree programmes, which are scheduled to replace fields of study under the provisions of the new wording of the Act. The project involved all 312 guarantors of over 500 fields of study implemented at MU.

Information structure and content were modified with regard to the external presentation of individual fields as well as in order to reduce the administrative burden associated with their management. To provide applicants with more insight, a **field motto** section has been added, featuring a brief slogan summarizing the unique nature of each field of study.

Comprehensive information on fields of study is now presented to applicants using the **attractive muni.cz website**, which also underwent significant alterations in 2016. In addition to the university website, applicants, students and the general public may also access information on all fields of study using the field of study catalogue included in the public part of the MU Information System. The catalogue includes basic information on all fields, including objectives, learning outcomes, graduate destinations, field of study guarantors and current student numbers and provides access to the final thesis archive.

Due to considerable demands placed on the quality of texts, both in terms of content and style, especially in view of their subsequent usage, it was necessary to create sufficient infrastructure to help field of study guarantors with the process of filling and reviewing the necessary information. A special-purpose **editing environment** was therefore created in the **Information System**, along with a detailed methodological guide for streamlining content and making sure that individual sections do not overlap.

Masaryk University has traditionally focused on the **support and development of lifelong learning for all professional and age groups**, as evidenced by the fact that all faculties as well as the Rector's Office were involved in the implementation of several hundred – largely professionally-oriented – lifelong learning programmes. A total of **18,296 participants** in full-time, distance or combined study mode took part in **886 programmes** in 2016.

Masaryk University is dedicated to providing a representative lifelong learning offer, which currently includes accredited degree programmes as well as professionally oriented supplementary, specialized and retraining courses for a wide range of professions. Typical participant groups primarily include teachers, doctors, social workers, state and public officials and sports coaches.

The University of the Third Age (U3A), which has been active since 1990, forms an inherent part of lifelong learning at Masaryk University. Its activities include collaborations with e.g. the South Moravian Regional Authority and the Brno City Municipality designed to provide homebased educational activities for the elderly; a total of 190 senior citizens took part in 9 such activities organized in 2016. Additional U3A partners include the National Heritage Institute, Moravian Library, Moravian Museum and, last but not least, Leipzig University. New courses have also appeared thanks to collaboration with the Consumer protection Association. A special-purpose course educated U3A participants about matters such as what a lease contract or issued notice should look like, how to conclude a contract with energy suppliers and how to resolve complaints.

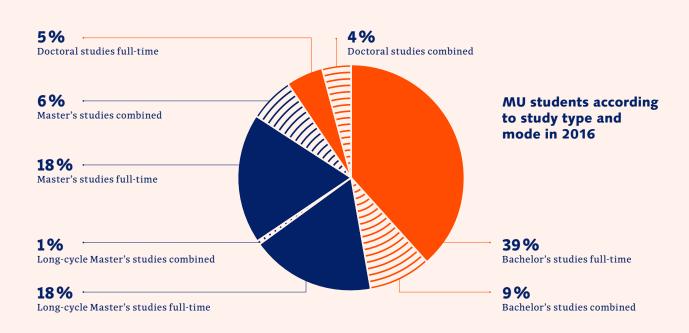
Throughout 2016, the U3A focused on the further development of activities designed to provide lifelong learning participants with increased electronic support, especially in the form of **new online courses offered to the general public via the Masaryk University Elportal interface**.

Finally, it is worth mentioning a specific example: in 2016 the Faculty of Arts expanded its educational offer to include a new set of **online humanities micro-courses**. Individual micro-courses are based on videos, usually presented in the form of a student–expert discussion, supplemented by testimonies of students enrolled in a given field. The platform includes written materials and verification tasks and provides participants with the option to engage in direct communication with teachers. The first series of prepared courses deals with the following topics: Migration throughout the Millennia, Buddhist Iconography, The Golden Bull of Sicily, Space in Mind and Language and Roman Art of Late Antiquity.

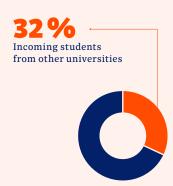
Number of students at MU

- Number of studies at MU as of 31 October
- Number of students (headcount) at MU as of 31 December





Proportion of students from other universities enrolled in Master's studies at MU



MU study offer in 2016

542Total number of fields of study

188Bachelor's fields of study

205 Master's fields of study 10 Long-cycle Master's fields of study 139
Doctoral fields of study

Note: total number of fields of study at MU, implemented in various forms, languages and field combinations.

Admission procedure for the 2016/2017 academic year (Bachelor's, long-cycle Master's and Master's studies)

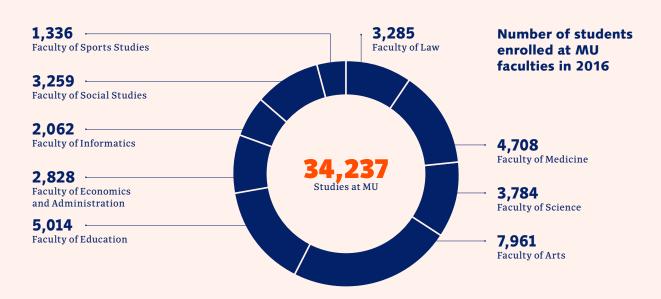
34,153

Number of applicants for studies

62.8%Applicants from outside the South Moravian region (Czech citizens)

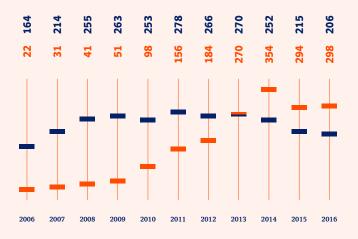
52,629Number of applications submitted

20,459 Number of admitted applicants 11,734
Number of enrolled applicants



Number of students with disabilities and learning disabilities

- Students with limited mobility and hearing and visual impairments
- Students with learning disabilities, mental disorders, etc.





Quality in Education



2.1

Internal Quality Assurance and Assessment System 2.4

Talented Student Support

2.2

Internal Field of Study Evaluation

2.5

Technological Innovation in Education

2.3

Student Surveys and Feedback

2.6

Implementation of New Teaching Methods and Formats

Internal Quality Assurance and Assessment System

In connection with the recently amended Higher Education Act, Masaryk University has established obtaining **institutional accreditation** as a key priority. Requirements include providing evidence of a functional quality assurance system for educational, creative and associated activities. Although some elements of quality assurance were introduced at Masaryk University before the amendment entered into force, designing a system interconnecting these elements in a meaningful way in accordance with all legal requirements was a key task scheduled for implementation in 2016.

The quality assurance system at Masaryk University is created in accordance with the principles of continuous improvement and sustainable development; furthermore, it is dedicated to building a shared culture of quality which enables all relevant internal and external actors to participate in feedback and thus reinforce the accountability of each member of the academic community. Implemented evaluations are based on objective and up-todate data and all evaluation methods must be consistent with the nature of the evaluated activity. Evaluations are carried out regularly and systematically; acquired knowledge is regularly integrated and assessed in a comprehensive manner. Last but not least, all decision-making procedures are transparent and take place according to predefined rules and criteria. The quality assurance system is based on internationally recognized principles, notably the Standards and Guidelines for Quality Assurance in the European Higher Education Area (ESG).

In October 2016 the Academic Senate approved the amended text of the university's most important internal regulation, i.e. the Masaryk University Statutes. Dozens of academics, students and other professionals contributed to the preparation of the new statute, with extensive discussions taking place throughout the academic community. Key innovations introduced by the Statutes include first and foremost the establishment of the Internal Evaluation Board. It has a total of 15 members and, in accordance with legal requirements, is chaired by the Rector. Additional members include academic employees from all MU faculties, students and two external academics. The board's main task will be to inspect the fulfilment of requirements for ensuring and evaluating the quality of MU activities and submit ruling on proposals to establish, extend or terminate degree programmes.

In December 2016, MU management simultaneously approved the content of a document entitled *Masaryk University Degree Programme Quality Approval, Management and Evaluation*, an internal regulation primarily designed to unify the way in which degree programmes

are established, implemented and managed, and which further sets out processes associated with their approval, preparation for accreditation and internal evaluation procedures meant to ensure and develop their quality.

Given the scale, significance and diversity of changes impacting the university in context with the publication of the amended Higher Education Act, it was necessary to provide a platform for discussions of specific points of impact relevant to individual faculties and academics throughout the university community. To this end, a university-wide discussion forum entitled Everything You Need to Know About the Amendment to the Higher Education Act was held on 10 November 2016 at University Cinema Scala. The event focused mainly on the role of degree programme guarantors and the future of degree programmes implemented at MU. Matters discussed at the forum included changes to the establishment and development of degree programme quality and transformations associated with the amended Act and the newly established National Accreditation Authority for Higher Education.

In cooperation with the Czech Rectors Conference, Council of Higher Education Institutions and the Centre for Higher Education Studies, Masaryk University organized the 17th annual University Quality Assessment Seminar. The seminar has traditionally provided Czech universities with an important platform for sharing experiences with quality implementation and development and a space for discussing current trends in this area. Hosted by MU for the seventh time in 2016, the seminar took place from 5 to 6 May at University Centre Telč and focused primarily on issues associated with the amended Higher Education Act and changes expected as a result. Addressed issues included conditions for institutional accreditation, quality assurance systems and providing proof of their functionality. Last but not least, the seminar also showcased best practice from foreign countries where continuous care for the development of degree programme quality has long been a matter of course.

Internal Field of Study Evaluation

Student Surveys and Feedback

2.3

The internal field of study evaluation is a continuous process which aims to contribute to the ongoing improvement of the quality of educational, creative and additional activities offered by individual fields of study while also helping to maintain the sustainability of excellent results in line with the strategy of the university and the strategies of other relevant parties.

The internal field of study evaluation process at Masaryk University is based on feedback and self-reflection. The guarantor of each field of study uses objective field-specific data to craft a self-evaluation report on a field which is subject to evaluation. The evaluation is based on data provided by students, graduate employers and other external partners, whose main task is to provide a holistic view of the profile and implementation of a given field. A subsequent discussion of the self-evaluation report and reviewers' reports provides a basis for the development of a long-term field of study strategy designed to propose solutions, eliminate weaknesses and, on the other hand, find ways of developing and reinforcing each field's strengths. All Bachelor's, Master's and doctoral fields of study implemented at MU are submitted for internal evaluation. A periodic internal evaluation cycle has been introduced to follow up on the reaccreditation process of individual fields.

Following the amendment of the Higher Education Act, the accreditation and re-accreditation of fields of study was suspended as part of a transition period which began in 2016. As a result, Masaryk University also temporarily suspended the internal evaluation process in order to adjust it in accordance with the valid provisions of the Act and other relevant regulations. The revised procedure — a key component in the university's efforts to provide high quality educational and creative activities — is scheduled for launch in September 2017.

In spite of the limited scope of the internal evaluation process in 2016, it was implemented in the case of 14 fields of study across all MU faculties. The evaluation focused mainly on study failure, with key recommendations calling for the introduction and strengthening of interactive teaching, the implementation of clear student profiling schemes with respect to the offer of selective courses and the increase of practically-oriented courses. In addition, evaluated fields should also strive for systematic cooperation with external partners and experts beyond the scope of existing internships with potential employers, e.g. by inviting them to participate in actual teaching activities.

Throughout 2016 Masaryk University continued to develop a complex system of surveys carried out among students and graduates in order to help the university establish and refine strategies aimed at applicants, students and graduates. In the past year, the range of internal institutional surveys was extended to include surveys focusing on doctoral graduates and on MU as perceived by secondary school students and applicants for studies; these surveys are discussed in detail in chapters 1 and 4.

The third annual Motivation and Expectations of Incoming Master's Students from Other Universities survey was conducted in the spring semester. The survey specifically focuses on first-year Master's students at MU who previously completed their Bachelor's studies at other universities (including at universities abroad). The aim of the survey is to continue mapping factors which led respondents to enrol in studies at MU and to establish what their study-related expectations are. A total of 307 respondents (i.e. a response rate of 41 %) completed the questionnaire.

The 20th annual **Completion of Studies at MU – Looking Back and to the Future** was conducted at the end of the academic year. The survey focused on the prospects of MU graduates in areas such as obtaining jobs as well as their interest in working abroad and feedback on studies at MU. 905 graduates of Master's and long-cycle Master's degree programmes took part, i.e. nearly 42 % of all students graduating in 2016.

In 2016, MU also held the fourth annual Premature Termination of Studies at MU survey which helped identified grounds for the early termination of studies, highlighted tools used to resolve study-related problems and elicited responses on work activities during studies, additional concurrent studies and plans for studies in the future. Thanks to the MU Information System, relevant students were contacted automatically once an unsuccessful study code was detected by the system, thus achieving an 18 % return rate, i.e. aggregating answers from 1,259 respondents. While this return rate does not represent the entire student body, its consistency is highly significant. As in previous years, the questionnaire was filled out more often by students who terminated their studies at their own request. The survey also invited respondents to leave a commentary detailing the circumstances of their study termination, an option utilized by 357 respondents in 2016.

For thirteen years, Masaryk University has been implementing the **Course Opinion Poll** at the end of each semester. In 2016 the poll underwent several major innovations, including a reduction from nine questions to a more streamlined six. Simultaneously, individual

Talented Student Support

faculties were offered the opportunity to propose up to three questions of their own to complete the set. This opportunity was utilized by the Faculty of Social Studies and Faculty of Informatics.

Students were also able to access poll results directly from the seminar group enrolment section of the IS MU. More and more teachers used the feedback feature enabling them to respond to student assessments of their pedagogical performance. Newly introduced features also included in interface for course guarantors which allowed them to comment on results associated with their courses in batch form.

Combined with the Course Opinion Poll being presented as a significant tool using the online.muni.cz portal, recent changes have contributed to the student participation rate increasing to above-average values in international comparisons, with nearly 11,000 students participating each semester, i.e. over one third of all MU students.

Supporting talented students by implementing special programmes designed to expand their qualifications is a prerequisite for producing successful graduates and motivated scientists. MU faculties offer various types of extra support for talented students; selected examples are listed below.

A unique study module, modelled on a template utilized by universities abroad, was introduced several years ago by the Faculty of Medicine. The **P-pool** programme (science-focused graduate programme for motivated medical students) is designed to support talented students' **involvement in science-oriented activities** from the very outset of their studies while effectively offering them an extension of the standard General Medicine degree programme. The Faculty of Medicine confirmed that students enrolled in the programme were familiar with practical medicine from their first year of studies and achieved significantly better study results than their peers; they were also successful at student scientific conferences and in many cases also participated in early publication activities.

The art of presenting and publicly defending achieved research results is a key component of preparation for a future academic career. In a similar move, the Faculty of Law has held several competitions for active students designed to test their abilities and help them develop existing knowledge and skills, including e.g. the Student Scientific Activity competition. In addition to the faculty, the competition is also supported by key Czech judicial institutions, which frequently locate prospective employees among successful students. In 2016, the Faculty of Law held the first annual Legal Debate Tournament, with two winning speakers subsequently participating in a final debate of five law faculties from the Czech Republic and Slovakia. The IUS et SOCIETAS Award is presented by the Faculty of Law in collaboration with the Faculty of Social Studies and the Jan Hus Educational Foundation in recognition of the most interesting works focusing on the social role of law and justice.

The Faculty of Social Studies has ceased to award scholarships for excellent results and is now motivating students with various awards, including the <code>InocencArnošt</code> <code>Bláha Scholarship</code> for the best Bachelor's thesis, which may be presented to students of any of the faculty's departments. The <code>Masaryk Scholarship</code> for <code>Gifted Political Science Students</code>, designed to support students participating in internships at renowned institutions, helps participants obtain valuable work experience and insight into the functioning of individual institutions while also increasing their job market prospects.

Technological Innovation in Education

Scholarships in support of outstanding Bachelor's and Master's theses are also awarded at the Faculty of Economics and Administration. In addition, the faculty also organizes the two-year-long **TopSeC** project (i.e. Top Students Centre), which provides motivated students with a unique opportunity to meet a range of experts, improve soft skills and peek into the inner workings of key companies. Project participants are selected using an assessment centre which takes into account their study-related activities, placements and internships and recommendations submitted by their teachers.

Talented students are also supported at the Faculty of Informatics. **Student research and development projects** aim to contribute to the development of free software while highlighting the creative potential and professional skills of the faculty's students in national and international contexts. Excellent students are provided with a **results-based scholarship** graded according to achieved learning outcomes while newly admitted students are eligible for a motivational scholarship; a total of 60 students made use of the latter option in 2016.

The Faculty of Science decided to expand an existing scholarship programme in support of students' creative activities in 2016, providing gifted students with the opportunity to obtain a scholarship in recognition of achieved creative results, publications, final theses or research results.

Thanks to a comprehensive support system, Masaryk University's educators may easily access trending technologies and utilize suitable tools in order to meet the specific requirements of individual fields of study. Each year, a number of new technologies are presented at the IS MU E-learning Open Space Conference along with practical hands-on demonstrations. Technological trends reflected in teaching in 2016 included the following:

Video content in the classroom

Traditional teaching methods increasingly tend to incorporate video content; the Information System currently features over 75,000 such videos. Interesting uses of video content include combinations of realistic video clips and 3D animation, e.g. a human skeleton superimposed over real-time joint motion, designed for students of the Faculty of Medicine. The medium is also used in a sophisticated manner at the Faculty of Education, where students use their mobile phones to create video presentations which are then evaluated and analysed, with feedback from teachers subsequently included in the video content itself.

E-courses: e-learning for the general public

In previous years, access to e-learning was limited to active students enrolled in studies at Masaryk University. However, in 2016, these technologies were made available to the general public. The Faculty of Medicine was the first to make use of this opportunity, offering e-learning preparatory courses specifically targeting international students. Many teachers are starting to utilize e-learning support tools in novel educational ways which bring additional attention to their areas of study. E-learning services may also be linked to the MU Shopping Centre, which offers teachers the opportunity to offer paid courses in the form of electronically provided services in cooperation with individual faculties.

Mobile technologies at lectures and seminars

Tools which make university lectures more interactive and attractive are becoming increasingly popular. The Faculty of Science now uses mobile devices as a standard part of communication. For example, students submit anonymous queries or fill out short surveys during lectures. Teachers thus receive instantaneous feedback and may respond in real time. The Faculty of Informatics employs similar tactics: using short self-evaluation tests administered to students via the IS MU and processed during class exercises using mobile devices, teachers are able to continuously verify knowledge acquired during lectures.

Implementation of New Teaching Methods and Formats

Masaryk University emphasizes the introduction of new technological trends and methods in teaching while also focusing on internationalization and collaboration with industrial partners. The **Masaryk University Development Fund**, an internal grant scheme announced by the Rector, is dedicated to meeting these objectives. **146 projects** – including **30 student projects** – worth a combined total of 11.975 million CZK were thus successfully implemented in 2016 within the institutional development plan framework. Selected examples of successful projects are presented below.

Faculty of Law: Development and implementation of the Foundations of Austrian Private Law course. The optional *Grundzüge des österreichischen Privatrechts* course was offered as a selective course within the framework of the project; the intensive course was taught in German by **Austrian private law experts from Austrian universities**.

Faculty of Medicine: Modernization and preparation of the **bilingual** teaching of first aid, anaesthesiology, pain medicine and intensive care in the form of PBL/TBL with an emphasis on decision-making processes. The project introduced the new and seldom used PBL/TBL methodology into the area of acute medicine while also focusing on evaluation methodologies, testing and teaching analysis. Interactive algorithms and tools in Czech and English were developed and published using the akutne. cz and akutne.eu websites.

Faculty of Science: The **Videolesson** project interlinks theory and practice in the teaching of chromatographic method I. A series of six videotapes developed within the framework of the project provides insight into the practical aspects of the topic and demonstrates individual separation techniques, instrument parts, function and utilization in practice. Video clips in Czech and English focus on the principles of individual methods, the functions of available instruments and the demonstration of current development trends.

Faculty of Arts: The Propaedeutic Seminar project focuses on the use of modern technologies in professional interpreting and translation. The project helped innovate the *Propaedeutic Seminar I and II* course and produce an overview of key applications and IT tools including instructions how to use them effectively in teaching and self-study activities. The course culminated with a simultaneously interpreted student conference which provided students with an opportunity to try their hand at cabin interpreting.

Faculty of Education: The project included the development of the Ethics for Non-Ethicists course as well as the innovation of courses including Selected Ethical Problems and Culture and History of Slovakia. By introducing Ethics for Non-Ethicists, MU filled an existing gap in teacher training for primary and secondary school teachers. A range of attractive teaching aids including an audiovisual I-walk guide presenting the testimony of Brno's Holocaust survivors were designed specifically for teaching ethics in the classroom.

Faculty of Economics and Administration: The project was designed to implement on-line voting in core mathematical and statistical courses at FEA. The project aimed to increase student participation in teaching by means of electronic voting. A database of issues, queries and quizzes was created and teachers were given the opportunity to instantaneously view voting results and subsequently publish correct solutions following an inclass discussion. Students were thus able to correct any mistakes and compare their performance with that of their colleagues.

Faculty of Informatics: Advanced Game Design. The aim of the project was to provide students with **modern visualization tools** and equip facilities with technologies essential for teaching and laboratory activities associated with the *Advanced Game Design* course. Students were thus able to explore the potential which modern virtual reality holds for the development of new games.

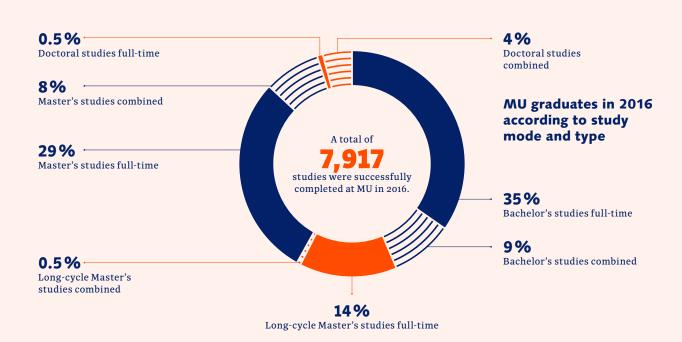
Faculty of Social Studies: Project-oriented teaching of Experimental Political Science. The project focused on the innovation of a course which now calls for students to form teams in order to tackle the individual stages of **experimental political science research** (problem formulation and its relevance, theoretical basis, experiment design, ethical research issues, data processing and analysis).

Faculty of Sports Studies: Implementation of modern educational methods in the field education of physical education and geography: applications using QR codes. The aim of the project was to introduce modern and **interactive navigation methods using QR codes** and electronic devices in summer training courses and field courses. The project attempts to respond to the massive expansion of smartphone and tablet use and harness their potential for educational activities in the area of geography and physical education at elementary and secondary schools.

Number of students per academic employee at MU

4 25.6
4 26.8
4 27.6
4 28.3
4 28.3
4 28.3
4 28.3
4 28.3
5 28.3

Number of studies per academic employee as of 31 October



University-wide student surveys implemented at MU in 2016

	Motivation and Expectations of Incoming Master's from Other Universities	Premature Termination of Studies at MU	MU Alumni Employment after Graduation	Completion of Studies at MU – Looking Back and to the Future
	Response rate: 41% , 307 respondents.	Response rate: 18 %, 1,259 respondents.	Response rate: 34% , 375 respondents.	Response rate: 39% , 853 respondents.
	University-wide Course Opi Spring 2016	nion Poll –	University-wide Course Opi Fall 2016	nion Poll –
Poll response rate: 24% , 7,081 students.				

Poll response rate: 34%, 10,756 students.

MU as perceived by Czech and Slovak secondary school students



Studies at MU as perceived by secondary school students



MU as perceived by Master's studies graduates





Master's students of all nine MU faculties were given the opportunity to attend a unique course entitled Israel and the Politics of Innovation: the Start-up Nation in International Perspective. Taught by leading Israeli experts, the course focused on start-ups, innovation and teamwork skills as well as the specific roles of individuals, institutions and the state. All lectures were also available to the general public.

Eran Wagner, course lecturer

Internationalization in Education



3.1

Foreign Language Teaching as an Integral Part of Studies

3.2

Language Centre and Foreign Language Teaching

3.3

Foreign Language Degree Programme Implementation and International Students

3.4

Student and Employee International Exchange Programmes

Foreign Language Teaching as an Integral Part of Studies

Masaryk University is dedicated to expanding the range of courses taught in foreign languages while also increasing the number of foreign-language courses offered in non-philological fields of study. Fulfilling these objectives is made possible primarily thanks to the long-term activities of foreign academics participating in an internal project which enabled over 320 international teachers (of which over 120 for a period exceeding 5 days) to lecture at MU in 2016. Thanks to this project, faculties and the Language Centre were able to organize lectures on trending topics such as recent advances in biomedical sciences (Faculty of Medicine) and innovation (Faculty of Science) as well as intensive week-long or two-week-long sessions supplementing entire semester-long courses. Foreign teachers also regularly participated in consultations with doctoral candidates.

Examples of internationalization processes implemented for the benefit of Czech students include specific activities carried out at individual faculties throughout 2016. The Faculty of Arts focused primarily on for the development of courses in English. In 2016, 126 foreign language courses were offered in non-philological fields, 11 new courses in English were created and 33 existing courses were repeatedly offered. The courses were attended by a combined total of 988 students.

The Faculty of Economics and Administration succeeded in stabilizing the number and structure of courses taught in foreign languages, increasing the involvement of students in these subjects and establishing recognition procedures for courses completed by students abroad. The faculty also launched the gradual introduction of compulsory study literature in English in courses included in Czech degree programmes. Bachelor's and Master's students are required to participate in an international placement or successfully complete at least one course taught in a foreign language.

The same requirement was introduced by the Faculty of Social Studies in 2014, with FSS students likewise being obliged to complete at least one compulsory or selective course taught in English. The requirement may also be met by completing a course in English during an international placement or exchange programme. In addition, the faculty expanded the offer of English courses in both Bachelor's and Master's degree programmes to a total of 160 courses, with an additional four new courses now offered in French and Spanish.

A number of activities designed to bolster foreign language teaching were implemented at the Faculty of Education, including a semester-long intensive block of English courses available to both Czech and foreign students. Starting in the autumn 2016 semester, the faculty's core pedagogical and psychological courses are being taught in both English and Czech.

Submitting final theses in foreign languages is undoubtedly a step in the right direction in terms of language competence development; the Faculty of Sports Studies has thus introduced a motivational scholarship in support of final theses written in English.

Foreign language teaching is systematically supported throughout the university thanks to an internal grant scheme organized by the Masaryk University Development Fund (MUDF) and annually announced by the Rector of MU. Grant competition topics include Strengthening of Teaching in English and Other Foreign Languages in Czech Degree Programmes and Strengthening Language Competencies of Academic Employees in Order to Prepare for Teaching Courses in a Foreign Language. Of the total number of 117 implemented academic projects financed by MUDF, 20 projects primarily focused on strengthening foreign language teaching competences; an additional 20 projects listed foreign language teaching as a secondary project focus. In 2016 MUDF thus supported 40 projects targeting foreign language teaching support, i.e. 34 % of all implemented academic projects throughout the university. Individual projects focused on e.g. course materials, contact teaching and lectures by visiting scholars. Most projects primarily dedicated to foreign language support were implemented by the Language Centre in 2016; some are outlined below.

The **E-learning course for the self-study of economic French** includes an interactive IS MU curriculum for the Self-Study of Economic French course. It consists of the three primary modules dedicated to the A2, B1 and B2 levels according to the Common European Framework of Reference for Languages. These modules include an online glossary (including pronunciation guides for A2 and B1), PowerPoint presentations on grammar, grammatical practice exercises with answers, reading and listening comprehension exercises with answers, practice tasks designed to assess the written and spoken word, a video tutorial entitled *Vivre et travailler en France* and an audio recording of a B2 oral exam with commentary.

The Innovation of English for Biologists III project is designed to produce an updated version of a semester-long language course based on the principles of collaborative learning and interdisciplinary cooperation through project-based learning. The project helps provide Master's students with advanced English language teaching skills in the area of biology-related fields of study. Authentic sources and materials associated with a specific glob-

Language Centre and Foreign Language Teaching

al problem (e.g. malaria) help students view individual topics from the point of view of different specializations.

The **Medical French** project focused on opening a new Medical French course for the benefit of both Faculty of Medicine students and for students of French at the Faculty of Arts seeking an understanding of medical terminology for translation and interpreting use. Language skills focused on both spoken communication (doctor-patient, doctor-doctor) and the written word (medical reports, prescriptions, CVs, cover letters).

The English for Students of Combined Studies at FMed and FSpS project was launched in order to prepare a two-semester e-learning course focusing on teaching English specifically to combined students. The project was based on the urgent need of the Faculty of Medicine and the Faculty of Sports Studies, whose combined students generally suffer from an imperfect command of the English language, which in turn makes is difficult for them to successfully tackle prescribed language courses. The course helps raise students' language competences to the required level. Modern methods such as peer-to-peer learning, engagement, representation, action and expression are introduced into the classroom. The interactive curriculum contains a comprehensive set of instructions, information, tests, exercises, keys and field-specific vocabulary lists.

The **English Autonomously** project helped develop a course based on the principles of autonomous learning, i.e. self-assessment, goal setting and reflection. Thanks to various forms of individualisation and modularization, students co-decide on the course objectives as well as on course content, deadlines, methods, strategies and evaluation. While this form of language learning is not a novelty, its implementation in the Czech Republic remains unique.

The MUOC: Masaryk University Online Course – Academic Writing and Publishing project focused on the development of a practical online academic writing and publishing course in English using the IS MU environment. The course platform includes an interactive curriculum with twelve thematic modules and special-purpose discussion forums. Individual modules focus e.g. on how to write the individual parts of a scholarly article and abstract, how to employ cohesion and coherence in academic style, how to paraphrase or cite sources or how to acquire creative writing techniques essential for developing an academic text.

The Language Centre (LC) plays a key role in the area of internationalization and language competence development. The centre, dedicated to meeting the needs of both Masaryk University students and employees, is the largest such facility in the Czech Republic. In 2016 the LC provided foreign language training for professional and academic purposes to over 17,000 students at all MU faculties. Students were given the opportunity to participate in academic writing courses, conference skills-enhancing courses, and over 30 videoconferencing sessions facilitation communication with colleagues from around the world. International students have also been invited to participate as native speakers in foreign language courses.

Commercial LC courses focused on English grammar and language learning skills as well as on Spanish and Chinese. The LC also teaches Czechs for foreigners, with 471 FMed students and 75 exchange students taking part in such courses in 2016. In order to provide academics teaching in English with adequate support, the LC organized an English-language programme with follow-up tutoring as well as the Academic Skills in English Summer School.

In 2016 the LC focused on sharing the experience of foreign language lecturers at universities within the framework of open events such as LC Thursdays and LC Week. Regular meetings of the heads of language centres active at Brno universities led to a more effective exchange of information while extended cooperation with Czech language centre directors facilitated the activation of the Czech and Slovak Association of Language Centres (CASALC). Active membership in international professional organizations (CercleS, IATEFL, EULETA) as well as in informal professional groups such as the Wulkow Group (language centre directors at leading European universities) and the Fiesole Group (universities providing language support for the EUI Max Weber postdoctoral programme) and the presentation of the LC's results at international conferences and in international journals enabled the LC to establish a substantial international collaboration network.

In the field of Czech language education for foreigners, the LC confirmed its position as an innovative workplace by winning the **2013 Quality Seal**, an award presented by the Centre for International Cooperation in Education in recognition of the best-implemented lifelong learning programme/Leonardo da Vinci programme (2013–2015). The winning project, i.e. the **mluvtecesky.net portal**, constitutes a platform for the teaching of Czech as a foreign language with general language as well as optional special-purpose and medical modules.

Foreign Language Degree Programme Implementation and International Students

Masaryk University cooperates with international universities to implement accredited joint, double and multiple degree programmes where students complete part of their studies at universities abroad. In 2016 **over 30 partner universities** across Europe and beyond were involved in a total of 13 international degree programmes implemented at MII

Joint programmes are offered at Masaryk University in a number of fields and are based on an interdisciplinary approach emphasizing international perspectives. A unique programme entitled Europe from the Visegrad Perspective, an international programme implemented by four Visegrad Group (V4) universities, allows students to spend one semester each at a university in Poland, Hungary, Slovakia and at Masaryk University. Similar undertakings include e.g. a two-year-long public administration and economics programme implemented in collaboration with Université de Rennes 1 in France and an interdisciplinary double degree European Governance programme organized in collaboration with Utrecht University which prepares graduates for a career in the European Parliament and similar EU institutions. The International Joint Master's Degree in Cultural Sociology, implemented in collaboration with the Karl-Franzens-Universität Graz, Università degli Studi di Trento and University of Zadar, is also very popular.

A total of 1,476 international students were enrolled in regular studies at MU in 2016 (excluding students from Slovakia). The total number of international students, i.e. including students from Slovakia, stood at 7,117. The highest numbers of international students enrolled in degree programmes taught in foreign languages were to be found at the Faculty of Medicine (662 students), followed by FSS (102), FI (40), FEA (21) and FA (17). Some were also to be found at FEdu (11), FSci (3) and FSpS (1).

The highest numbers of **international students enrolled in degree programmes taught in Czech** were to be found at the Faculty of Arts (222 students), followed by FSci (125), FMed (70), FEA (64), FSS (59) and FEdu (32).

International student numbers at MU (degree programmes taught in Czech and in foreign languages combined) prominently featured students from **Russia** (FA, FEA, FI), **Ukraine** (primarily FA, FI, FSci, FSS) **Great Britain** (primarily FMed), **Germany** (primarily FMed) and **Portugal** (primarily FMed).

In 2016 the Faculty of Medicine continued to provide funding for US students through federal loans from the US Department of Education.

3.4

Student and Employee International Exchange Programmes

A total of 1,928 outgoing MU students participated in short-term international mobility programmes in 2016. Most students chose to participate in a study or work placement through the Erasmus+ programme; a total of 251 students and 40 graduates took part in work placements. The most popular study destinations included Germany, Spain, France and Austria while students participating in work placements frequently headed to France, the United Kingdom, Austria and Germany.

A total of 331 MU students were able to study abroad thanks to the International MU Student Mobility Support internal development project in 2016. An additional 97 students travelled abroad thanks to MU's membership in the international ISEP network and bilateral agreements with partner universities around the world. University contracts allowed students to study in Japan, China, Mexico, Australia and Canada. Partnership agreements concluded at the level of individual faculties helped 153 outgoing students to travel abroad while an additional 24 were able to do so thanks to intergovernmental agreements. International travel was also conducted outside of institutional arrangements, with 81 so-called freemovers utilizing this format.

In 2016, MU introduced a grant in support of short-term student mobility (under 28 days) and awarded it to an initial batch of 55 students participating in short-term stays of 14 to 28 days.

Prior to travelling abroad, students were given the opportunity to engage in **intercultural preparation** for their international placement. In addition, the Centre for International Cooperation (CIC) organizes a traditional three-day *Keep Moving* event each October to inform students of international study and work opportunities.

In 2016 Masaryk University won the **International Student Satisfaction in Europe 2016 Award**, presented annually by the StudyPortals organization to European universities on the basis of a satisfaction survey conducted among international students. Along with thirteen other European universities, MU received an outstanding grade of 9.5+ points out of 10. The survey results show that international students visiting the Czech Republic are most satisfied with MU.

In total, 1,465 incoming students were enrolled in various exchange programmes at MU in 2016. Most, i.e. 677 students from **Spain**, **Poland**, **France**, **Germany** and **Portugal** were able to do so thanks to the Erasmus+ programme. In 2016, a total of 172 Erasmus Mundus students were also active at MU. A further 69 students from **Palestine**, **Georgia**, **Israel**, **Indonesia** and **Algeria** were able to study at MU thanks to the new Erasmus+ ICM project.

A total of 140 students, most frequently from the USA, came to MU from various partner universities and through the ISEP network. **Summer schools** organized by the Centre for International Cooperation attracted a further 127 students to Brno. Most came from Australia (67) and Canada (34).

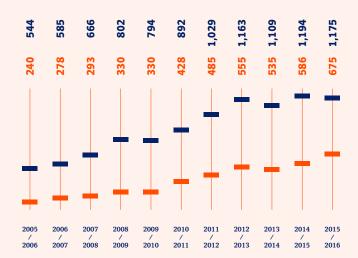
An **Orientation Week** organized for students arriving at the beginning of each semester helps incoming students with their initial adaptation at MU and in Brno. Over 700 international students took part in 2016.

MU academic employees continued to participate in activities organized by the **Theodor Herzl Distinguished Chair**, a programme funded by the Israeli government. The program was attended by 14 academics from Israel while 5 Israeli students attended an annual summer seminar for PhD candidates held in Telč. **Israel Days**, held at MU in November, hosted a Rector's delegation from four leading Israeli universities. MU also continued to organize activities within the **Masaryk Distinguished Chair** programme – coordinated by the CIC – which facilitates placements of Czech researchers at the Israeli Interdisciplinary Center Herzliya. Five participants took advantage of this opportunity in 2016.

The annual **Masaryk University Staff Training Week** (MUST Week) was organized by the Centre for International Cooperation for the benefit of international administrative employees. Participants included employees of international relations departments, librarians, IT specialists and specialists working with special needs students. A follow-up event after *MUST Week* was dedicated to the training of non-academic employees from outside the EU, especially in matters such as foreign affairs and international marketing.

Outgoing and incoming students participating in Erasmus, Erasmus+ and Erasmus Mundus programmes

- Outgoing MU students (study placements and internships)
- Incoming students (study placements and internships)



10 most popular study placement and internship destination countries among outgoing MU students

Germany
Spain
France
Great Britain
Austria
Italy
Portugal
Poland
Slovenia
Belgium

10 most common incoming exchange students' countries of origin

Spain
Poland
France
Australia
Germany
USA
Portugal
Italy
Canada
Russia

Internationalization in education



Final theses in English (in non-philological fields of study) defended in 2016



Joint, double or multiple degree programmes implemented in collaboration with foreign universities



Proportion of degree programmes accredited in foreign languages

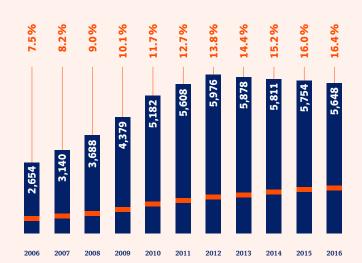
Number of foreign students (excluding Slovak citizens) in accredited degree programmes

- Number of foreign students
- Proportion of foreign students



Number of Slovak students in accredited degreee programmes

- Number of Slovak students
- Proportion of Slovak students



Offer of foreign language courses for students of non-philological fields at MU

English	
German	
French	
Russian	
Greek	

panish	panish
ortuguese	ortuguese
rabic	rabic
hinese	hinese
atin	atin



Radovan Musil from Red Hat (left) and Ondřej Krajíček from Y Soft signing the agreement

Strategic Priority:

Individualized Doctoral Programmes



4.1

Support Activities for Doctoral Candidates and Supervisors

4.2

Awards for Talented Doctoral Candidates and Doctoral Studies Graduates

4.3

Doctoral Candidates and Their Career Paths

Support Activities for Doctoral Candidates and Supervisors

Masaryk University currently offers **60 doctoral degree programmes** (all doctoral programmes are available in both full-time and combined study mode) and over 130 fields of study, with a combined total of over 3,000 enrolled doctoral candidates. A majority of doctoral students and successful graduates hail from the Faculty of Science, Faculty of Medicine and Faculty of Arts.

Thanks to a significant overhaul of the university website, online featured content now highlights international study opportunities for doctoral candidates as well as opportunities to participate in various research projects and information on state-of-the-art technologies and equipment available to individual research units.

In addition to innovating the MU website, the university published a brochure entitled *Get a Ph.D. at MU* which presents key doctoral fields implemented at MU faculties and introduces research centres such as CEITEC MU and RECETOX which have established doctoral schools and cooperate with institutes of the Academy of Sciences of the Czech Republic.

Faculties and doctoral boards are dedicated to preparing young scientists for their future careers in specific areas of research. Activities contributing to the development of doctoral candidates' soft skills are thus supported throughout the university.

The **PREFEKT course**, providing doctoral candidates from all MU faculties with the theoretical foundations and practical skills required by project management, took place throughout the spring 2016 semester. Acquired skills were subsequently tested using examples of international grant applications (Horizon 2020, International Visegrad Fund, etc.).

In addition to the semester-long PREFEKT course, dedicated primarily to research funding, an intensive weeklong version of the course entitled **Scientific Work Basics** focused on other transferable skills (presentation skills, protection of research results, computer security basics, etc.). The course was organized and supervised by the Association of Moravian Workplaces of the Academy of Sciences of the Czech Republic.

The key theme of 2016 was the development of competences and support for interdisciplinarity among doctoral candidates at MU. Key activities implemented at MU on an annual basis include the **Seminar Series**, a lecture cycle featuring international experts whose lectures are subdivided into the *Life Sciences Seminar Series* and *Seminar Series in Social Sciences and Humanities*. A total of 22 lectures were held in 2016, with an average number of over 200 attendees present at each lecture. In addition to the Seminar Series, MU also hosts the

specialized **Mendel Lectures**, a lecture cycle featuring **Nobel Prize laureates**.

A range of lectures, courses and seminars for Masaryk University's doctoral candidates are traditionally co-organized by the Academy of Sciences of the Czech Republic. Not only did the **Association of Moravian Workplaces of the ASCR** provide lecture venues, it also invited a number of interesting figures. Since these lectures are attended by doctoral candidates from all faculties, they promote mutual learning and facilitate valuable interdisciplinary discussions.

Targeted efforts promoting an individualized approach to students also focus on educators and academics participating in doctoral candidate supervision. A **workshop for newly admitted doctoral candidates** was organized in cooperation with the **University of Vienna.** The workshop aimed to introduce current trends in the supervision of talented students and at the same time provide supervisors from abroad with an opportunity to discuss rules governing doctoral degree programs at national and institutional level.

Doctoral candidates are deliberately integrated into research projects or may become regular members of large research teams. Since 2010, creative activities – and especially those performed by doctoral students – have been eligible for the **Student Project Grant**. In 2016, the total available funding for this competition stood at 134.89 million CZK, distributed among specific university research projects and student conferences. A total of **160 projects** received financial support, including 10 student conferences.

Scholarships in support of doctoral studies are paid out to all doctoral candidates enrolled in full-time studies for the duration of the standard period of studies. **Each year a minimum monthly scholarship** amount, derived from an amount provided by MEYS, is designated by the Rector. In addition to this amount, scholarship programmes in support of excellent candidates enrolled in doctoral degree programmes are also announced by individual faculties. **Specific research** constitutes a further source of financial support for doctoral candidates, especially as it supports doctoral research projects while also contributing to faculty projects.

The **Industrial Ph.D.** project was successfully implemented in 2016 thanks to corporate collaborations instigated by the Faculty of Informatics. The faculty signed a contract with Red Hat and Y Soft, who committed to supporting selected doctoral candidates in the form of a scholarship for a period of four years. This mechanism provides companies with access to high-quality employees before their graduation.

Awards for Talented Doctoral Candidates and Doctoral Studies Graduates

Masaryk University annually recognizes the achievements of its doctoral candidates at the **Rector's Awards**, specifically in the *Best Students in Doctoral Programmes* and *Outstanding Doctoral Thesis* categories. In addition, MU doctoral students also receive recognition outside of their alma mater, both at home and abroad.

The Rector's Award for an Outstanding Doctoral Thesis was presented to Martin Machay from FEA and Tomáš Slanina from FSci. The Rector's Award for the Best Students in Doctoral Programmes was awarded to three doctoral candidates in 2016: Ondřej Bonczek (FSci), Lenka Dědková (FSS) and Jakub Gajarský (FI). The Rector's Award for Outstanding Artistic Activity was awarded to Jana Nedomová (FEdu).

Doctoral candidates from the Faculty of Science and the Faculty of Informatics successfully participated in the Brno PhD Talent competition. The teacher of the year award of the City of Chomutov was presented to FEdu doctoral candidate Daniela Jonášová. The legal talent of the year award for 2016, held under the auspices of the Prime Minister of the Czech Republic, was presented to FLaw doctoral candidate Jan Tomíšek. The Award of the Minister of the Interior for extraordinary results in security research was presented to a group of FI scientists in recognition of their work on the KYPO Cyber Exercise & Research Platform; the group included several doctoral candidates from the Faculty of Informatics: Tomáš Jirsík, Daniel Tovarňák, Petr Velan, Martin Vizváry, Karolína Burská and Dalibor Toth. Petra Vychytilová, a doctoral candidate at the Faculty of Science until 2016 and now a researcher at the Centre of Molecular Medicine of CEITEC MU, received the Award of the Minister of Education, Youth and Sports for outstanding students and graduates and extraordinary student actions.

The **Max-Planck-Gesellschaft scholarship** for a month-long stay at the *Max Planck Institute for Foreign and International Criminal Law* in Freiburg awarded to FLaw doctoral candidate Petr Škvain constitutes a major international success.

At the 69th Annual Gaseous Electronics Conference — GEC 2016 in Bochum, FSci doctoral candidate Adam Obrusník succeeded in winning the prestigious **best student lecture award** in a busy competition of students from the University of Iowa, Nagoya University and the University of York.

4.3

Doctoral Candidates and Their Career Paths

In recent years, the situation of doctoral studies graduates i.e. their specific application, has not been the subject of a university-wide survey implemented as part of the institutional survey system. As doctoral studies constitute one of Masaryk University's strategic priorities, a survey specifically designed to **map the career paths of doctoral graduates at MU** who left to work at other institutions was launched in 2016.

The survey focused on graduates who successfully completed their studies between 1 January 2011 and 1 July 2016 and who currently have no work agreement or agreement to complete a job at MU. The survey was implemented in the form of an electronic questionnaire and administered using the Surveys application in the IS MU from 15 November to 11 December 2016. Of the total number of 1,105 eligible respondents, the questionnaire was answered by 375 people, i.e. the survey enjoyed a 34 % rate of return.

Among persons who left MU, the most commonly represented sphere of primary activity was an engagement at another university or research institution (39 %). The second most frequently selected option was the private or business sector (25 %), while many graduates also opted for work at other public, state administration or government institutions (20 %).

The highest proportion of graduates leaving for work at higher education and research institutions was established at the Faculty of Science (63%) and Faculty of Social Studies (57%). On the other hand, the lowest share was found at the Faculty of Law (13%) and Faculty of Education (17%).

Graduates most frequently left for an institute of the Academy of Sciences of the Czech Republic or for foreign universities or research institutions (mostly in the USA, Sweden, Great Britain and Austria). Other public research institutions and Brno universities were also significantly represented.

From the point of view of specific jobs, the largest group (34 %) described their application as **specialists in the field** (e.g. physicians, lawyers, teachers, etc.); many of these were simultaneously working in various leading positions. The second most prominent category was the **post-doctoral position**, reported by 15 % of all respondents. A further 12 % were engaged in work in academic teaching positions and 8 % in academic research positions.

14 % respondents indicated they were **currently working abroad**. Among the graduates of individual faculties, the proportion of those working abroad was highest in the case of the Faculty of Informatics, Faculty of Science and Faculty of Medicine.

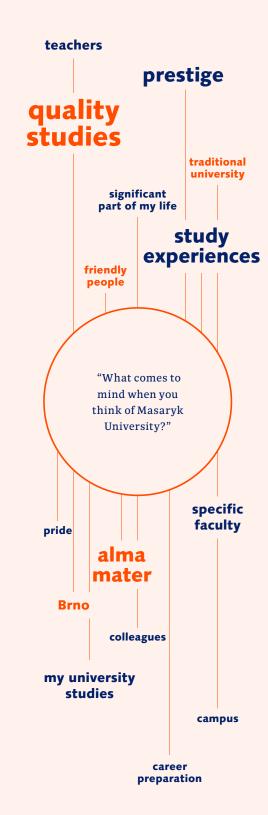
MU as perceived by doctoral studies graduates

The majority of respondents had been involved in some kind of employment at MU in the past. Reasons for not extending such engagements primarily included external grounds (work on time-limited tasks, lack of capacity at the department, etc.); on the contrary, reasons associated with individual decisions were mentioned relatively rarely.

Most graduates received a job offer from their current employer during their doctoral studies (53 %), most of them prior to their last year of studies. Only approximately one third of all respondents started to work their current job only after completing their studies (almost half of these respondents were directly offered the job and most others spent a relatively short time looking). In the case of academic positions, graduates generally started to work for their current employers most frequently prior to completing their doctoral studies.

In response to a question whether the completion of studies expanded their career opportunities, half of all graduates responded with "strongly agree" while another third answered with "agree".

Answers to questions about the "MU brand" revealed that **MU** is **highly respected among graduates**. Attributes associated with MU included **quality, prestige** and **environmental friendliness**. Numerous associations also indicated that respondents frequently felt a close relationship to MU, an interconnectedness of MU and student life and an affinity to life in Brno.



Number of foreign doctoral studies graduates

- Number of doctoral studies from other foreign countries
- Number of doctoral studies from Slovakia



Top foreign employers of doctoral studies graduates

Harvard University, USA

University of Oxford, Great Britain

Columbia University, USA

University of California - San Diego, USA

University of Washington, USA

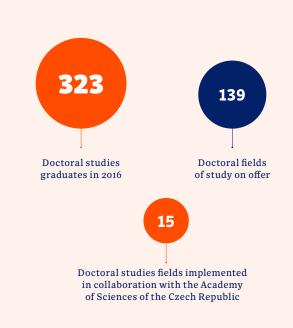
University of Toronto, Canada

Karolinska Institute, Sweden

Ghent University, Belgium

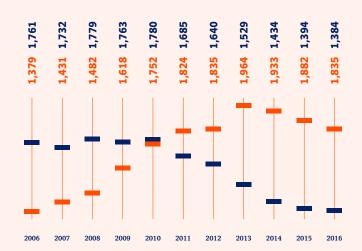
University of Iowa, USA

University of Massachusetts, USA



Number of doctoral studies graduates at MU

- Combined studies as of 31 October
- Full-time studies as of 31 October





Research Excellence and Relevance



5.1

Masaryk University's Scientific Performance

5.2

International Research Support

5.3

Knowledge Transfer and Utilization of Research Results

Masaryk University's Scientific Performance

According to the **Web of Science** (WoS), MU authors **published 1,926 scientific articles** (Articles, Proceeding Papers, Reviews) in 2016. In comparison with previous years, the number of publications is steadily increasing, as is the number of research result citations. In addition to publications listed in the WoS database, a number of specialized monographs and chapters were published in books issued both at home and abroad.

The quality of publications, measured by the number of publications included in the top 10 % of the best journals in a given field, is also an important indicator. While the total share of these publications stood at 7 % in 2011, the number rose to 11 % by 2016. Journals ranked among the top 10 % (i.e. journals featuring articles by MU authors) include Science, Nature-affiliated journals, Blood, Leukemia, Molecular Cell, Plant Cell, Proceedings of the National Academy of Sciences of the United States of America, Analytical Chemistry, Environment International, etc. When the top 25 % of journals in a given field (first quartile) is assessed, the increase becomes even more pronounced: 22 % in 2011 grew to 33 % by 2016. The field breakdown of publications according to the WoS follows trends established in previous years. Fields with the most publications include oncology, neuroscience, environmental science, biochemistry and molecular biology.

The number of publications co-authored by Masaryk University researchers within the framework of international collaborations has also registered a rising tendency over the past decade, as recorded by WoS. While the **share of publications with international co-authors** stood at only 36 % in 2011, this figure **rose to 48** % **by 2016.** Most publications were created in cooperation with institutions in the US (14 %), Germany (10 %), Great Britain (7 %) and Italy and France (6.5%). Within the Czech Republic, MU scientists most frequently collaborated with the Academy of Sciences of the Czech Republic (13% of all publications), Charles University (10%) and the Brno University of Technology (5%).

SELECTED MAJOR SCIENTIFIC DISCOVERIES PUBLISHED IN 2016:

MORALISTIC GODS, SUPERNATURAL PUNISHMENT AND THE EXPANSION OF HUMAN SOCIALITY

The key piece of scholarship, co-authored by Masaryk University religious studies experts, was published by *Nature*. The article explains in detail that without fear of the gods who commit evil deeds, people would not have developed many of today's laws and social rules.

MYSTERY AT THE ENDS OF ONION CHROMOSOMES

Researchers from CEITEC MU managed to record the end-sequences of telomeres found in plants of the *Allium* genus. While detailed knowledge of the end sections of these chromosomes may be used for genetic modification purposes, the importance of this discovery lies in its significance for further research into the evolution and function of telomeres and their significance for the emergence of new species. Furthermore, scientists also managed to implement a novel research method when examining the telomeres.

HOW AN ANIMAL COMPASS WORKS

The fascinating ability of some animals to respond to the geomagnetic field has already been proven by existing research. However, until now scientists did not know how this mechanism works and how it facilitates the detection of the planet's magnetic pole. A breakthrough discovery proved that the *cryptochrome* protein found in the eye is responsible for the functioning of this internal compass.

MAPPING THE ORIGIN OF EUROPEANS

A new genetic study, published in *Nature*, was co-authored by experts from Masaryk University. The study shows that – despite the fact that modern humans came to Europe from Africa some 45,000 years ago – the ancestors of most of today's Europeans, representatives of the Aurignacian culture, came to the continent some 38,000 years ago.

International Research Support

In 2016, the European Commission published an interim report on results achieved by countries participating in the challenges of the **HORIZON 2020** research and innovation programme. According to this report, **Masaryk University is the most successful Czech institution**, both in terms of the number of projects and in terms of the amount of funding acquired. In 2016, twelve new H2020 projects were launched; of which 3 falling under pillar I – *Excellent Science*, 1 under pillar II – *Industrial Leadership*,

4 under pillar III – Societal Challenges, 3 under the specific area of Spreading Excellence and Widening Participation, and 1 under the Shift2Rail initiative. The total number of approved H2020 projects thus reached 32, with a total budget in excess of 12.5 million EUR.

In 2016, three additional projects were launched under the auspices of the **SoMoPro** regional programme, co-funded by the EU's R&D framework programmes aimed at supporting excellent scientists arriving in the South Moravian region from abroad. MU is the **most successful institution in the region** with respect to the acquisition of SoMoPro projects: implementing 44 out of a historical total of 62 projects.

The Masaryk University International Scientific Advisory Board (ISAB MU) was established in 2016. Four internationally renowned experts now help the university to develop scientific strategies and provide independent assessment and advice on a range of science-related issues.

The first advisory board session produced fourteen recommendations designed to improve the quality and international image of MU, primarily in areas such as doctoral studies and research funding.

Board members include **professor Josef Jiřičný** of the University of Zurich, **professor Peter Williamson** of the University of Cambridge, **professor Thomas A. Henzinger** of the Austrian Institute for Science and Technology and **Professor Marie-Janine Calic** of the University of Munich. **Mary O'Connell**, a molecular biologist active at MU since 2014 as part of the ERA Chair programme, functions as the advisory board's representative.

Three excellent scientists working at MU received a **Neuron Foundation award** in 2016: Pavel Plevka, Zuzana Holubcová and Vítězslav Bryja.

Furthermore, the **Werner von Siemens Award for Young Scientists** for best primary research project was awarded to Vladimír Šindelář and his team for the discovery of *bambusuril*, a new substance whose unique properties may be used e.g. in medicine to detect anions or to facilitate the controlled transportation of drugs within the body.

5.3

Knowledge Transfer and Utilization of Research Results

The Technology Transfer Office (TTO) is a university-wide unit tasked with ensuring MU intellectual property protection, exploiting the commercial potential of viable MU research and development results and locating opportunities for their real-world utilization.

In 2016, the TTO successfully processed over 230 requests from within MU, implemented various **activities in over 90 companies** and external entities working with the university and supported the establishment of one spin-off company. Examples of successful commercialization include a digital nuclear radiation spectrometer, which was developed at the Faculty of Informatics and protected as a utility model; a manufacturing license was subsequently acquired by a private company.

The TTO legal department assisted with the preparation of 218 different Czech and foreign agreements and continued to protect the university's intellectual property. MU obtained a total of 917,000 CZK in intellectual property revenue and licensing fees.

In accordance with the MU Strategic Plan, the TTO helped prepare several OP EIC projects and also focused on the implementation of new systemic measures designed to support the development of promising technologies and research outputs at MU (Proof of Concept stage, i.e. PoC). In May 2016, support for 7 projects was launched (second internal PoC call of the TACR Gama programme) while a great deal of effort was also devoted to media coverage. The status of projects supported in the first call was subject to review following their presentation at a session of the MU Technology Transfer and Commercialization Board. The implementation of a new methodology for the evaluation of project applications, was received positively. Furthermore, four internal PoC Humanities projects with significant overlapping applications were supported.

In 2016, TTO employees participated in credited teaching at MU faculties within the framework of the **Research** and **Development in Practice** course and provided MU employees with intellectual property protection training.

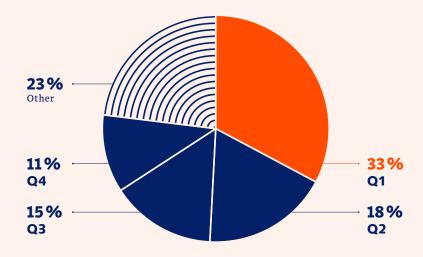
TTO experts also launched the EUCA-InVEst project, an undertaking designed to implement a series of training sessions for academics from Central Asia. The TTO is also a partner of the international INSPIRE project.

The TTO likewise continued to implement a range of PR activities including the publication of the INTERFACE newsletter, the organization of a fourth annual TT Day and the issuance of a series on intellectual property in the *Muni* magazine. The TTO represented MU at the Invent Arena international inventors exhibition.

Publications published in IF journals by quartile in 2016

Publications according to Web of Science (Article, Review and Proceeding Paper)

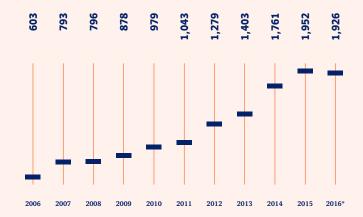
Note: * Data for 2016 may not be complete due to Web of Science indexing delay.



Number of MU publications in the Web of Science database

Number of publications (Article, Review, Proceeding Paper) published in a given year

Note: * Data for 2016 may not be complete due to Web of Science indexing delay.



Number of MU publication citations according to the Web of Science

Number of citations per year (Article, Review, Proceeding Paper) in WoS

Note: * = Data for 2016 may not be complete due to Web of Science indexing delay.



Top 10 foreign institutions involved in joint publications with MU authors in 2006–2016 according to most cited results

University of California

University of Toronto

University of Barcelona

Centre National de la Recherche Scientifique

Harvard University

Max Planck Society

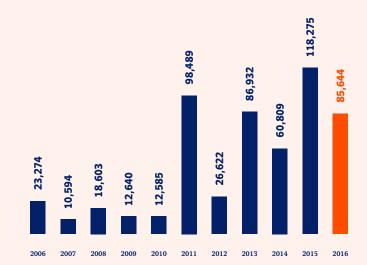
Ruprecht Karl University Heidelberg

Karolinska Institute

University of London

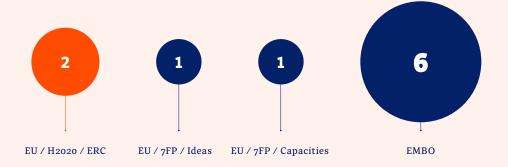
Eberhard Karls University of Tubingen

Non-investment revenue from EU framework programmes



Non-investment revenue from framework programmes (in thousands CZK)

Prestigious individual grants awarded to MU researchers (investigation launched 2012–2016)





Strategic Priority:

Research Efficiency and a Stimulating Research Environment



6.1

Research Performance and Outcome Quality Evaluation

6.2

Science Support Services

Research Performance and Outcome Quality Evaluation

In the past year, **bibliometric analysis** (analysis of publications) has become a crucial element in decision-making strategies. Since 2014, when MU began using Clarivate Analytics' (formerly Thomson Reuters) *InCites* analytical tool, the importance and extent of bibliometric methods in various scientific activity contexts has continued to increase. By 2016, the recognized potential of bibliometrics and its massive utilization in countries with a developed science assessment culture gradually led MU to establish a completely separate agenda with dedicated **methodologies and expertise**. This expertise is gradually expanding due to active engagement with international professional

Bibliometric analyses conducted by the Research Office of the Rector's Office are used in both regular and ad hoc mode by various users, i.e. university management, faculty management, unit management and individuals. The analyses facilitate orientation in the science environment (e.g. for the purpose of selecting a limited number of scientific results for part of a nation-wide assessment) and help monitor MU scientific performance; furthermore, they also focus on ongoing analyses implemented by faculties at the level of individual fields and, last but not least, on detailed multidimensional analyses of units and individuals.

communities and continued bibliometric education.

Key bibliometric support activities carried out in 2016 include faculty analyses conducted for the purpose of annual **evaluation interviews**. These analyses led to a valuable discussion on the real response to scientific work at MU. A more detailed analysis of fields of study implemented at the Faculty of Science followed the discussion.

Input from the above mentioned activities was subsequently elaborated in an in-depth analysis of fields implemented at MU; based on the findings, an MU profile emphasizing the impact of scientific output in various field-specific communities was developed.

Although bibliometrics does have limitations, it instigates valuable discussions, contributes to enhancing the culture of scientific activity and helps develop research and publication strategies.

6.2

Science Support Services

Excellence in research is supported by Masaryk University through internal **MU Grant Agency** projects. In 2016, MU held the **fifth annual interdisciplinary research project competition**, with four additional projects being selected for support. The **international grant preparation support programme** for applicants seeking prestigious international grant funding was also successfully implemented.

Two new GA MU Research Support Programme categories were introduced in 2016, namely category E – Support for the Improvement of Excellent Results Quality and category H – Individual Interdisciplinary Research Projects. Both categories specifically provide support for primary research.

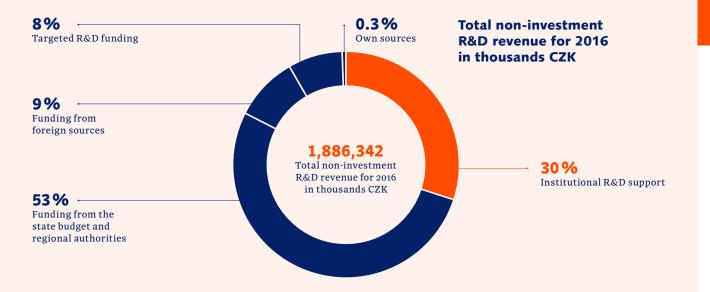
A series of seminars, presentations, trainings and individual consultations held throughout the year were designed to increase the success of MU in national and international grant competitions. The flagship event is **Grants Week**, a multi-day event which provides scholars and doctoral candidates with up-to-date information on grant opportunities as well as practical information on how to build a successful project proposal. A total of 26 experts spent three days lecturing to **nearly 400 participants**. The entire *Grants Week* programme took place in English.

Newcomers were provided with training including an introduction to national and international grant programmes and the MU project support system, several **information events specifically focusing on H2020** (with regard to administrative and financial aspects, open access to data and intellectual property), and a one-day event dedicated to the *Marie Skłodowska-Curie Actions: Your gateway to an exciting research career*, which offered theoretical and practical information on participation in the Horizon 2020 mobility programme in support of development and career growth. The MEYS INTER-EXCELLENCE programme information day and Large research infrastructure information day both focused on Czech grants.

The **Research Support Programme** provides researchers with funding for the preparation of international research projects; furthermore, a **dedicated support scheme** was established for **ERC grant applicants**.

The updated MU website also includes information on the utilization of shared Central Laboratories equipped with unique scientific instruments; laboratory time is offered to all university units as well as to other academic institutions and private companies.

The Project Records Information System is also constantly developing, especially on the basis of faculty requirements. Electronic project proposal approval introduced in 2016 greatly increased the flexibility of project approval and submission processes.



Institutional R&D support acquired by MU from Czech sources in 2016

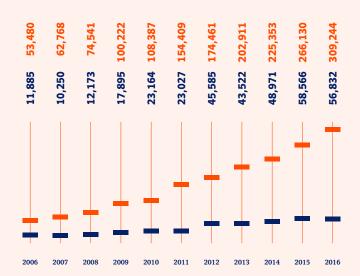


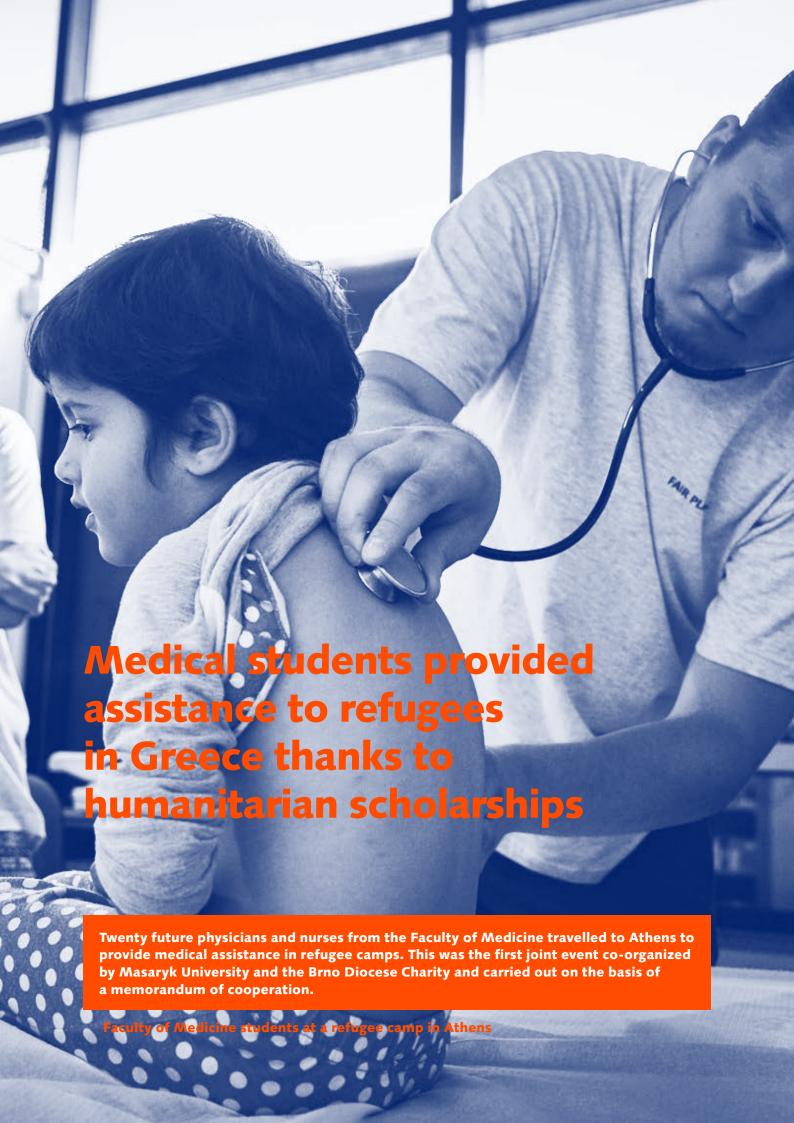
Total acquired targeted non-investment R&D revenue



CSF subsidies received by MU

- CSF subsidies received by MU as sole beneficiary (in thousands CZK)
- CSF subsidies received by MU as co-beneficiary (in thousands CZK)





Organizational Culture Based on Shared Values



7.1
Inspirational University

Environment

7.2
Student and Employee Events

7.3
University Associations and Student Activities

7.4
Internal Communication
and Visual Identity

7.5
Student Services and Counselling

Inspirational University Environment

Student and Employee Events

Appreciating high-quality work constitutes an important tool for strengthening the university's inner culture. Masaryk University thus regularly recognizes the excellent performances of its employees and students, e.g. by means of a Masaryk University Rector's Award or the presentation of a Masaryk University medal.

In 2016, a total of **21 Rector's Awards** were awarded in **11 categories** running the gamut of the university's areas of activity.

Following a proposal submitted by the Faculty of Economics and Administration, the university **awarded an honorary doctorate to Professor Michiel S. de Vries**, a world-renowned theoretician in the field of public administration who significantly contributed to the development of this area at Masaryk University.

A number of employees received recognition for their long-term excellent work for the university: the small bronze medal of MU was presented to 5 employees, the bronze medal of MU to 10 employees, and the silver medal of MU to one employee. The **gold medal of MU was conferred on professor Jiří Grygar**, a graduate of Masaryk University who achieved extraordinary success in the popularization of his field.

Awards were also presented by individual constituent parts of MU. A total of 39 employees and 4 collectives of authors across MU were thus recognized, usually with a **dean's award**. Most were presented by the Faculty of Education and the Faculty of Economics and Administration on the occasion of the anniversary of their establishment.

In addition to receiving internal prizes, university employees also won a range of **competitions outside the university**. The activities of **31 university employees were recognized in this manner**.

Associate professor Miluše Juříčková from the Faculty of Arts received the Royal Norwegian Order of Merit, an order granted to persons without Norwegian nationality. Associate professor Vítězslav Bryja of the Faculty of Science received an important award for his placement in the Neuron Impuls competition. The prestigious Friedrich Wilhelm Bessel Research Award was presented to professor Antonin Kučera of the Faculty of Informatics. Associate professor Vladislav Mužík of the Faculty of Education was awarded the prestigious Thulin Award by the Fédération Internationale D'Éducation Physique Europe.

Czech awards presented in 2016 include the Lawyer of the Year Award in the Constitutional Law and Human Rights category, awarded to Professor David Kosař of the Faculty of Law, and the *Special Award of the Czech Society for Film Studies*, presented to Radomír D. Kokeš of the Faculty of Arts for his contribution to film literacy in the Czech Republic.

Cultural, social and sporting events for students and employees form an important part of university life. The student community's sense of belonging is based on countless events spread throughout the semester. Each semester starts and ends with SemesterSTART and SemesterEND events, which have been held for a number of years under the auspices of the Faculty of Arts Students' Endowment Fund. A celebration of International Students' Day on November 17 is a significant occasion; the festive event includes a lantern parade around Brno organized by the MU Alumni and Friends Association, the MUAS Student Chamber and the Faculty of Arts Students' Endowment Fund.

Additional cultural events take place at individual faculties to commemorate their founding, e.g. in 2016 the Faculty of Education celebrated 70 years since its founding while the Faculty of Economics and Administration marked a quarter century since its establishment. Regularly held faculty days also commemorated 18 years of the Faculty of Social Studies.

Furthermore, **student scientific conferences** are regularly organized by the Faculty of Medicine and Faculty of Science; the Faculty of Social Studies holds a conference of Inocenc Arnošt Bláha scholarship holders.

Informal events are also frequent, with the **students of medicine and law** being best known for their celebrations of reaching the halfway points of their studies.

A wide range of sporting events also contributes to the development of the student community. In 2016 the hockey match between Masaryk University and Charles University attracted a record number of nearly 8,000 spectators. MU likewise participated in a soccer match and a rowboat race against the Brno University of Technology.

The university also implements a range of additional leisure activities for its employees. In addition to the traditional **Masaryk University Christmas concert**, the Faculty of Arts also organized a similar event featuring e.g. Iva Bittová, Vladimír Maňas and Jan Čižmář. Christmas concerts were also held at several other faculties at the end of the year.

Thanks to the Children's Corner at the Faculty of Social Studies, **Easter afternoons** and **St. Nicholas afternoons**, complete with playful workshops, are held regularly for the benefit of employees, students and their offspring. The Faculty of Social Studies also organizes autumn wine tastings or a Semestrend event prior to the beginning of summer vacation, which specifically provides employees with the opportunity to share their culinary arts.

University Associations and Student Activities

The Faculty of Education and Faculty of Sports Studies hold a **Children's Sports Day** while the Faculty of Informatics organizes a barbecue event called **Schrödinger's Grill**. For the first time ever, a large-scale informal meeting of the entire academic and non-academic community was held at the Faculty of Education.

Faculty employees also participate in a number of sports activities, including **Bike to Work**, an activity popular e.g. at the Faculty of Economics and Administration with a total of 43 active employees and doctoral candidates. Once a year, faculty employees compete at the pre-Christmas **faculty badminton tournament**. Even the Faculty of Law participates has an affinity for sports, especially the traditional **Vysočina Legal Hike** events.

Numerous sporting events also naturally take place at the Faculty of Sports Studies, including the **Helping with Movement** event, which then uses collected donations to purchase sports equipment for disabled children.

The entire academic community comes together regularly on the occasion of **Dies academicus**, a ceremonial gathering where Rector's Awards are traditionally presented. In late November, the **15**th **annual Masaryk University Wine** was announced, a welcome opportunity for social gatherings of university employees and many guests.

The pinnacle of the university's social life includes annual **faculty balls** where employees mingle with students and graduates, and the Masaryk University Student Ball, organized by the university-wide MUNIE association. In 2016, the Bobycenter Hotel hosted a record-setting number of MU students and employees. The event was co-organized by the Faculty of Informatics Student Union, which provided dancing lessons on the spot thanks to the **MU Dance Club**.

The activities of university-wide as well as faculty-based student associations form a significant part of student life at MU. **Over 60 associations** focusing on diverse areas – from theatre to debate organization to conference mediation and internationalization – were active at MU in 2016. While some associations are devoted to cultural and leisure-time activities (ProFIdivadlo, MU Symphony Orchestra, Philosophical Troupe), others focus on providing students with information on international study opportunities (AISEC Brno, IAESTE LC Brno, IFMSA CZ) as well as providing assistance for incoming international students (MU International Student Club).

Student associations constitute a link between studies and practice while also helping establish good relations with the general public. Some associations are dedicated to activities directed outside the university, including e.g. Be International (Faculty of Social Studies), while others, such as the Brno branch of the European Law Students Association (ELSA) organize student events like the Masaryk Student Party. Many associations provide students with up-to-date information in their field of activity: Re:Views Magazine is published by students of English and American Studies while Global Policy focuses on international relations and European studies, Psyhub.cz examines a variety of psychology-themed topics and Security Outline is dedicated to security studies. Radio R and MuniTV provide a general information and community-oriented information service.

Masaryk University's student associations bring a variety of topics to life. Thanks to their activities, students as well as the general public were able to participate in a large number of debates, seminars and workshops, including e.g. seminars on finance organized by the FEA Investors Club and lectures on contemporary philosophy held by the Brno Analytical Circle. The newly formed Civitas society was created at the Faculty of Education in order to organize discussions on civic education. The Meet and Inspire series, where various topics are addressed using informal educational methods, also holds a great deal of educational potential. The event is hosted by MUNIE, the largest student association at MU, which also organizes the annual Associations Fair and co-organizes the Brno Majáles event and its Masaryk University zone.

In 2016, MU students first participated in the **Waste-Collection** event, cleaning up the university campus in Bohunice. Finally, football and floorball matches between MU and BUT were also held in large part thanks to the activities of student associations.

Internal Communication and Visual Identity

In connection with the strategic goal of building an internal culture based on shared values, the preparation of an internal communication strategy and the subsequent implementation of proposed tools was launched in 2016.

The strategy was elaborated on the basis of the conclusions of an internal communication audit which took place from January to April 2016 at two selected faculties - the Faculty of Social Studies and the Faculty of Science - and at the Rector's Office. The aim of the audit was to describe the current level of internal communication, organization culture, level of awareness and cooperation, and then identify weaknesses and propose improvement measures. The audit was carried out by an external agency in the form of controlled interviews with key internal communication personnel, qualitative research of opinion leaders, quantitative research (40 % of addressed employees took part) and an analysis of existing communication resources. The audit findings revealed the need to establish a unified internal communication platform for all employees. Three new channels for communicating with university employees and students were proposed as part of the strategy: an employee newsletter, an internal communication network utilizing Yammer, and an employee portal.

Since the beginning of the autumn 2016 semester, the **employee newsletter** has informed MU employees once a month about key events, strategic decisions, new legal norms and regulations, changes in personnel and other news. By the end of 2016, a total of four issues had been distributed, with almost half (43 to 47 %) of the 4,000 recipients, i.e. employees with an employment contract of over 0.5 fulltime employment equivalents, reading the newsletter at some point.

The pilot phase of the Muni Yammer communication network was also launched. A total of 11 pilot groups were identified and 15 potential moderators were trained by a Microsoft-recommended expert. Without any massive promotion, Muni Yammer attracted a total of 300 users, of which approximately 10 % were active. Based on experience with the pilot phase of the Muni Yammer network, a code of conduct was drawn up, some technical problems were identified and subsequently eliminated and a communication campaign designed make full use of the university communications network starting in the spring 2017 semester was launched.

In connection with the launch and implementation of the first two internal communication tools, a proposal for a university employee portal was also prepared; the portal will include links to existing functional applications as well as IS and Inet applications used by employees on a daily basis. The portal will play an informative role in key decisions while also acting as a platform for important communication with employees and providing a feedback channel.

In connection with the current state of new visual trends, MU also focused on **updating its unified visual style** in 2016. The aim of the process was to create a common MU symbol with a functioning system of partial logotypes and to achieve unification of fragmented practices in the use of logos representing individual workplaces and projects. University materials were thus branded with a new element, a common label bearing the letters MU but excluding the original Latin inscription. Faculty identities were preserved in spite of the update, with their individual logos, colours and university fonts remaining intact.

In connection with the above, printed matter templates for different purposes and manuals governing the usage of the innovated logo for faculties and workplaces were also prepared. Faculty employees simultaneously received training designed to promote the correct usage of the uniform visual style. The implementation of the updated unified visual style was finalized by the launch of a special sablony.muni.cz platform which provides print data for office as well as professional graphics use. At the same time, it facilitates a smooth transition to the use and implementation of the new logo.

The project also gradually opened a related topic, i.e. that of **strengthening the MU brand**, which in turn launched a series of surveys among various target groups (applicants, current students, graduates) designed to establish Masaryk University's position among competitors.

Student Services and Counselling

In October 2016 the MU Career Centre launched JobCheck-IN, i.e. Masaryk University's official career portal designed to connect students, recent graduates and employers. By the end of the calendar year it had been utilized by over a hundred companies and 3,666 students browsing over 400 advertised jobs. The portal is designed for Masaryk University students and graduates within 18 months of successfully completing their studies; it is capable of recommending job offers which correspond to the qualifications of the target group and indicates which of the job requirements a given candidate currently meets. The portal provides students with an overview of what knowledge and skills are most sought after on the job market, and, should some of them appear to be missing, students can focus on acquiring them during the course of their studies.

The 10th JobChallenge career fair was attended by over 2,400 students of Brno-based universities; over 100 companies presented their job offers to future employees at the traditional event held at Adam Gallery. Additional career offers could be found in the JobChallenge catalogue, distributed at individual faculties throughout the academic year.

The **interactive Industry Showcase** also proved to be a popular event. The moderated discussion format provided five participating companies with sufficient space for presenting employee requirements, introducing career opportunities and providing information on relevant sectors of the job market. Students also received valuable information about company conditions and requirements, salaries and career growth opportunities.

Career consultations most frequently focused on issues associated with field of study choice and job market prospects. Key areas included: how to find application in the field, where to look for job offers or how to set up one's study and work focus. Career Centre lecturers offered consultations to people interested in structuring their CV content. Among other things, these consultations included demonstrations of model job interviews. A number of counselling sessions also focused on providing career-related psychological diagnosis complete with an interpretation of its outcomes.

Additional counselling activities were carried out independently by individual faculties, e.g. by the **MU Maths** and Stats Support Centre operated by the Faculty of Economics and Administration. The centre is dedicated to helping students correctly evaluate data used in diploma theses and solve mathematical problems. During the autumn semester 2016 alone, the centre provided in-person assistance to over three hundred students.

Services for disabled persons or persons with specific learning disabilities are provided throughout MU by the **Support Centre for Students with Special Needs**, which has a capacity of 80 places in public computer rooms and study rooms with 24-hour operation equipped with workstations featuring **compensation software for disabled persons**; the centre also operates a publishing house specializing in tactile literature including graphics and maps in Braille, and runs a video studio for recording documents in Czech sign language.

In the autumn 2016 semester, MU registered a total of **504 studies** of persons with the following disability types: 77 visually impaired persons (interannual decrease of 10 %), 60 hearing impaired persons (decrease of 10 %), 69 persons with limited mobility (increase of 10 %), 161 persons with learning disabilities (decrease of 2 %) and 137 persons suffering from autism spectrum disorder, other mental health problems and chronic somatic diseases (increase of 11 %). A further 4 students with disabilities were studying at MU within the international exchange programme framework and 41 were participating in lifelong learning.

In addition to students, teachers and scientific employees working at MU in 2016 also included 4 visually impaired, 8 hearing impaired and 3 wheelchair-bound persons.

Public university libraries at MU house 1,530 volumes in Braille and a total of 6,990 volumes are available in electronic form, including as hybrid books, a format developed at Masaryk University. In 2016 the Teiresias Centre launched the Daleth mobile application for work with a catalogue of issued publications and, in cooperation with the Institute of Computer Science, completed the development of the Counsil videoconferencing system which facilitates distance learning for sign language

Masaryk University also managed to retain its status as chair of the **Association of Service Providers for University Students with Special Needs**, an association of 13 public universities (as of 2016) actively striving to fulfil their responsibilities associated with providing an accessible learning environment.

Masaryk University Rector's Awards awarded in 2016

Rector's Award for Outstanding Creative Activity

Prof. Mgr. Jiří Macháček, Ph.D., Faculty of Arts, MU

Rector's Award for Outstanding Artistic Activity

Mgr. Jana Nedomová, Faculty of Education, MU

Rector's Award for an Outstanding Sports Performance

Bc. Veronika Mišková, Faculty of Sports Studies, MU

Rector's Award for Long-term Excellence in Research

Prof. PhDr. Petr Macek, CSc., Faculty of Social Studies, MU Prof. MUDr. Jindřich Špinar, CSc., Faculty of Medicine, MU

Rector's Award for Outstanding Research Results Achieved by Young Scientists under 35

RNDr. Martin Maška, Ph.D., Faculty of Informatics, MU Assoc. Prof. RNDr. Ondřej Slabý, Ph.D., CEITEC Mgr. et Mgr. Adéla Souralová, Ph.D., Faculty of Social Studies, MU

Rector's Award for Extraordinary International Grant Competition Results

JUDr. David Kosař, Ph.D., LL.M., J. S. D., Faculty of Law, MU

Rector's Award for the Active Development of Civil Society

Mgr. Lenka Gulová, Ph.D., Faculty of Education, MU

Rector's Award for Outstanding Teachers

JUDr. Lenka Dobešová, Ph.D., Faculty of Law, MU Prof. RNDr. Radan Kučera, DSc., Faculty of Science, MU Ing. Michal Kvasnička, Ph.D., Faculty of Economics and Administration, MU

Rector's Award for Outstanding Students in Master's Programmes

Bc. David Klaška, Faculty of Informatics, MU MUDr. Lukáš Mach, Faculty of Medicine, MU Bc. Monika Stanková, Faculty of Science, MU

Rector's Award for an Outstanding Doctoral Thesis

Ing. Bc. Martin Machay, Ph.D., Faculty of Economics and Administration, MU RNDr. Tomáš Slanina, Ph.D., Faculty of Science, MU

Rector's Award for Outstanding Doctoral Candidates

Mgr. Ing. Ondřej Bonczek, Faculty of Science, MU Mgr. Lenka Dědková, Faculty of Social Studies, MU RNDr. Jakub Gajarský, Faculty of Informatics, MU

Satisfaction and identification with the university based on student surveys

Survey

Motivation and the Expectations of First Year Students at MU

Late 2015

First-year Bachelor's and Master's degree students generally choose MU due to its wide field of study offer and thanks to the university's prestige. Approximately one third of all surveyed first-year students have indicated that studies at MU exceeded their expectations, another 40 % indicated that studies at MU fulfilled their expectations. According to respondents, study highlights include the wide range of fields and courses on offer, well-equipped libraries, state-of-the-art instrumentation and a friendly atmosphere.

Surve

Completion of Studies at MU – Looking Back and to the Future

Summer 2016

Almost three quarters of recent graduates of Master's and long-cycle Master's programmes are happy with the education provided by MU. A total of 83 % have reported that finding a job was relatively or very easy. According to graduates, MU highlights include the wide range of study fields on offer, the MU Information System, access to electronic information resources, the university's course offer and the high quality of available instrumentation.

Survey

Motivation and Expectations of Incoming Master's Students from Other Universities

Spring 2016

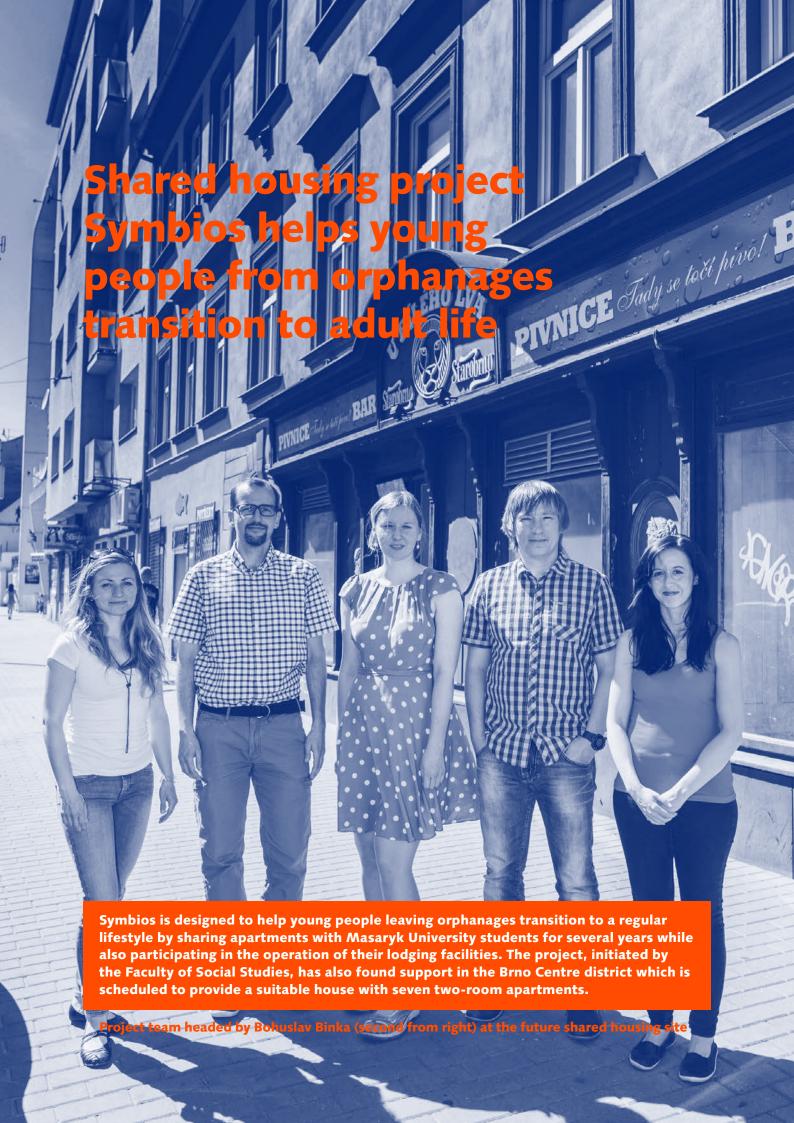
Students enrolling in Master's studies at MU after completing their Bachelor's studies elsewhere have indicated that the wide range of fields and courses on offer as well as teaching quality, opportunities to participate in international placements and access to electronic information resources constitute the strong suites of studies at MU. With respect to teaching content and methodology, studies at MU have generally exceeded or fulfilled their expectations. A total of 91 % of all respondents believe they made the right choice when opting for MU.

Survey

MU Alumni Employment after Graduation

Autumn 2015

A survey conducted among MU graduates who completed their studies one to two years ago and who are now engaged in work activities has shown that 87 % of them are satisfied with their existing jobs. A similar proportion of respondents refers to their current job as prospective. 91 % of all graduates indicated that they are satisfied with how the university has prepared them for real life, 8 out of 10 would study at Masaryk University again given the chance.



Strategic Priority:

Inspiration and Social Responsibility



8.1

Key Projects Implemented in Response to Societal Challenges Alumni Relations
Development

8.2

Masaryk University in the Media

8.5

8.4

Mendel Museum

8.3

Cultural Role

8.6

Masaryk University Press

8.7

Library Services

Key Projects Implemented in Response to Societal Challenges

The university is an important institution not only in terms of its educational function, but also with respect to the fulfilment of a unique social role. As social responsibility is one of the pillars of inner university culture, a number of events focusing on topical issues were held in 2016. The refugee crisis and migration was a widely debated topic. The Faculty of Arts organized the Migration, Minorities and Intercultural Dialogue project which included a panel discussion and a series of lectures on the subject. Faculty of Law students were given the opportunity to participate in providing legal aid to applicants for international protection within the framework of the Legal Clinic of Refugee Law course and to thus examine a lesser-known aspect of the refugee issue. The Faculty of Medicine dispatched medical students directly to refugee camps in Greece where they provided assistance to migrants for periods of time up to two weeks in duration. These trips were co-organized by the Brno Diocesan Charity.

A further hot topic, the issue of **inclusive education** in schools, was tackled by several Faculty of Education projects. The problem of inclusion was a primary impetus for the organization of the **Together in Education conference**, held by the University in cooperation with the Ministry of Education, Youth and Sports of the Czech Republic. Key outcomes of the conference, which primarily targeted teachers and educational advisers, included the development of a new concept for teaching young educators which made inclusive education part of the common pedagogical and psychological basis at the Faculty of Education. In the future FEdu students will work directly with socially disadvantaged families or in low-threshold treatment facilities.

Social exclusion was also examined as part of projects investigated by the Faculty of Social Studies and the Faculty of Economics and Administration. The Department of Environmental Studies (FSS) proposed shared housing for MU students and young people leaving orphanages in order to facilitate their social integration. The organizers launched a crowdfunding campaign in support of the Symbios project, which managed to attract over 100,000 CZK. The shared housing project will be co-financed by the Agency for Social Inclusion of the Office of the Government and the City of Brno; a suitable house has already been located and slated for renovation by the municipal authority.

FEA has started a programme designed to **develop the financial literacy of socially disadvantaged citizens**. In cooperation with the prestigious **Citi Foundation**, it is educating students in such a way which not only provides them with financial erudition, but which also prepares

them for the further spreading of such awareness. Students then act as financial literacy trainers capable of passing on the required information at dedicated seminars. Thanks to the contribution of many non-profit organizations, seminars took place e.g. at the Magdalenium House, at the Brno Bohunice Prison and at orphanages in the South Moravian region.

Regular workshops focusing on active movement and games for persons with special needs were organized by the Faculty of Sports Studies. Physical movement seminars were offered to the clients of Kociánka Center Brno, Parkinson Club Brno and to students with specific educational needs such as visual, hearing or physical disabilities.

In connection with the university's socially responsible role, the MU Rector introduced an award for the active development of civil society at the 2016 Dies academicus ceremony. The first instance of the award was presented to Lenka Gulová of the Faculty of Education, who has long focused on examining means of support for students with special educational needs, multicultural education and the development of an inclusive environment in schools. She also worked on a project designed to foster the development of the Ukrainian educational system and organized the construction of a leisure centre in Angola. The Alice Garrigue Masaryk Award, awarded in recognition of human rights achievements by the US Embassy in the Czech Republic, was presented to Zuzana Lenhartová of the Faculty of Education, founder and coordinator of the Helping People on the Run initiative.

Masaryk University in the Media

8.3

Cultural Role

In 2016, Masaryk University successfully bolstered its position as a significant educational and research institution in the Czech media space. This is clearly indicated by an analysis of its media image, processed internally by MU on a regular basis.

The overall publicity rate achieved by Masaryk University – established using an analysis of printed, radio and television media included in the Anopress database – was approximately one third higher than in 2015; the **number of mentions was thus highest since 2009** when data collection began. The vast majority of mentions were neutral or positive.

More so than in previous years, university topics appeared in **national media**, with a large share of them being **expert commentaries** (especially by political scientists) and mentions of activities and statements by Rector Mikuláš Bek. Increased year-on-year growth also took place in the area of magazine publications, a segment which the MU Press Office has been focusing on a long-term basis.

A major media theme linked to Masaryk University in 2016 included coverage of events commemorating **28 October** and **17 November** as well as the **displaying of the flag of Tibet** at Masaryk University in connection with the visit of the Dalai Lama. Traditional topics such as Antarctic research also received a great deal of attention, as did events such as the tic-tac-toe competition pIšQworky and the university hockey match (against Charles University in 2016).

The most popular research result was a collaboration between political scientists from the Faculty of Social Studies with the European Values think-tank dedicated to the **study of pro-Russian propaganda**. The media were also very interested in **cancer research** associated with CEITEC or with the Faculty of Medicine. Popular topics also included the **KYPO Cyber Exercise & Research Platform** as well as the activities of Faculty of Education students associated with **inclusive teaching**.

The Faculty of Social Studies remained the most frequently mentioned faculty even in 2016, mainly thanks to expert commentaries. Thanks to the amount of scientific discoveries presented, the publicity of the Faculty of Medicine and Faculty of Science achieved significant year-on-year growth. Very high year-on-year growth was also registered by the Faculty of Economics and Administration. In the same way, the Faculty of Sports Studies has also become much more visible over the course of several years, likewise largely thanks to the presentation of research results. Significant research achievements included e.g. the development of healthy footwear for pregnant women and **studies focusing on nutrition**.

Masaryk University is a significant presence in the cultural life of the Moravian metropolis. To a great extent, this is thanks to University Cinema Scala, which hosted a total of 75,000 spectators in 2016, thus becoming the fourth most visited single-screen cinema in the Czech Republic. In addition to providing high-quality productions for the general public, MU also utilizes Scala to fulfil the venue's original educational mission, i.e. by organizing various conferences and meetings of a more professional nature. In 2016, University Cinema Scala hosted the international Cyberspace conference, an event organized by the Faculty of Law and the Faculty of Social Studies, as well as X-TOP, organized by the Faculty of Science. Additional events included an international symposium accompanying the Brno Biennale of Graphic Design or the Meeting Brno festival which featured discussions on hot topics such as the refugee crisis.

The wide range of the university's cultural activities was supplemented by performances by theatre companies based at the Faculty of Informatics and Faculty of Arts. Pieces premiered in 2016 included *Heidegger* is a Gentleman and Consorting with the Constitution, or On Plato without Plato, performed by the **Philosophical Troupe**.

ProFI Theatre of the Faculty of Informatics premiered a piece entitled **Onegin was a Russian**. As the actors are recruited from among students enrolled in the university-wide elective course Theatre Play, the members of this theatre ensemble change with each new academic year. The faculty also held the **16**th **annual Faculty of Informatics Film Festival**, an event dedicated to short student films of various genres. Since 2011, the event is held under the auspices of the Mayor of the City of Brno.

In addition to theatre companies, several musical ensembles and choirs are also active at MU. The **Masaryk University Choir**, which regularly performs at festivals and frequently joins symphonic and chamber orchestras or accompanies theatre performances, received the title of **absolute Grand Prix winner** at the Montreaux Choral Festival in 2016 and thus confirmed its leading position among the world's amateur choirs.

As in previous years, the Faculty of Arts joined in UNESCO World Philosophy Day by organizing **Humanities Week**. The programme showcased a wide range of research and educational activities implemented at the Faculty of Arts. The event featured conferences, professional and popularization lectures and presentations on research and teaching in areas such as philosophy, psychology, pedagogy, linguistics, library studies, film theory, theatre studies, music, visual arts, religion, history and archaeology. The entire Humanities Week was **open to the general public**.

Alumni Relations Development

In September, researchers and science enthusiasts from among the general public took part in **Researchers' Night**. The event, which formed part of a European science initiative, included over a hundred different activities dedicated to the topic of security and took place at six MU locations, including – for the first time – the Faculty of Arts. The event was attended by approximately **7,300 people**.

Research results were also presented at the successful **Science Slam** project, where researchers appeared in the role of actors catering to an audience – and simultaneously to a jury. The event was held in both the autumn and spring semesters, for the first time ever in University Cinema Scala. **Over 400 spectators** came to see the non-traditional science event, selling out Scala completely.

Masaryk University remains dedicated to **cultivating a relationship with its graduates**. The university is well aware of their potential, which allows it to interconnect the academic community with professionals from a range of areas.

In 2016, the university utilized several electronic communication tools to make contact with its graduates. A new alumni website was launched, a special Facebook profile page for graduates regularly published posts about university events and an **electronic newsletter** was distributed to **nearly 60,000 addresses** using a recently internally developed tool for conducting e-mail campaigns. The eighth issue of the printed **Graduate magazine**, published by the university once a year, was sent to over 4,000 addresses in the Czech Republic and abroad.

In 2016, the so-called **MU Alumni Card** expanded its services to include a range of graduate benefits such as free entry to university libraries and discounts applicable to language courses and lifelong learning. A total of 2,650 cards had been issued by the end of 2016.

University support is also extended to both individual and collectively organized graduate activities. In 2016, the university continued its close cooperation with the **MU Alumni Network**.

Key activities were also organized by individual faculties, which function as alumni contact points. In 2016, the successful tradition of meeting key Faculty of Law graduates continued with the organization of the 10th annual Days of Law international conference. In connection with the seventieth anniversary of its founding, the Faculty of Education launched a new tradition with the Teacher of the Year award, to be presented on an annual basis to teachers who are also faculty alumni. Since 2015, the Faculty of Social Studies has been updating an online gallery of alumni with inspirational career paths and publishing interviews with successful graduates in the *Atrium* magazine. In 2016, the Faculty of Medicine organized a fiftieth anniversary graduation meeting for class of 1966.

Mendel Museum

Masaryk University Press

8.6

A **new permanent exhibition** was opened at the Mendel Museum in 2016. The grand opening took place on 23 July to coincide with Mendel's birthday celebrations. Designed by the respected Brno architect Zdeněk Fráněk, the new permanent exhibition constitutes a significant shift in the quality of services provided by the museum. From the opening until the end of the year, the exhibition was viewed by several thousand visitors.

The museum was also active in other areas, organizing two short-term exhibitions on new abbey premises and expanding its presentation activities. The first exhibition, featuring artists from Canada and the Czech Republic, was organized by the Embassy of Canada in Prague. The second event was a photographic exhibition of works by Kateřina Pračková.

Another **exhibition**, entitled **Celebrating a Map's Birthday**, introduced items housed in the collection of the Department of Geography of the Faculty of Science. It was held on the occasion of the 300th anniversary of the publication of Johann Christoph Müller's map of Moravia in 1716. The exhibition included information on measurement procedures, cartographic processing and outdated map printing procedures. Both the original printing matrix used by the Brno engraver Johann Christoph Leidig and a new copy of the Müller map made using original copper plates were on display along with a richly coloured hand-drawn copy of the map dedicated to Emperor Charles VI and some of the oldest map depictions of Moravia by Paul Fabricius, Jan Amos Komenský and Georg Matthäus Vischer.

Additional activities included the production of a Mendel-themed presentation at the Techagro trade fair, collaboration with Czech Television on a documentary film about the life of G. J. Mendel, the organization of a seminar about Professor M. Rostohar and co-organization of a summer commemorative event entitled *Mendel is Back*. Several events were held thanks to the Paleoart – Art and Science (PAS) project, an informal association of artists dedicated to continuing the tradition of Zdeněk Burian. Additional exhibitions organized by the Mendel Museum included **Track** – dedicated to the use of scientific methods in criminology – as well as **Medicine** and the **MU Herbarium**, which were exhibited outside of Brno.

The Mendel Museum also hosted a number of conferences including a conference on the occasion of **International Day of Pulses**, an event organized by the *Association of Legume Growers and Processors*. In 2016 the museum also helped prepare the traditional **Mendel Lectures** cycle which welcomed seven distinguished lecturers from the USA, Germany, Great Britain and Japan.

Masaryk University operates one of the leading European university publishing houses. All publishing activities are carried out under the **Masaryk University Press** brand. In accordance with the MU Strategic Plan, a development concept for the 2016–2020 period included several key strategic goals including an objective to continue developing Masaryk University Press as a prestigious university publishing house dedicated to the presentation of significant scientific and research results achieved by the university, producing popular educational titles including translations of successful foreign-language publications and functioning as a hub for electronic publications at MU while also providing available bookshop services to all target groups.

Masaryk University is one of the largest professional publishers in the Czech Republic. In 2016, Masaryk University Press published 75 study-related publications and 305 professional publications (318 in both printed and electronic form and 62 only in electronic form). The university has also recently joined the ISMN system for notated music. Key projects published in 2016 included the release of the work of Prof. Ladislav Bařinka: Plastic and Reconstructive Surgery, a pictorial publication by Ivar Otruba entitled In Search of Paradise Gardens and an extraordinary book by Hana Librová and her students entitled The Faithful and Reasonable: Chapters on the Delay in Environmentalism. Faculty-produced titles included e.g. Travelling to Maturity; The Žítková Goddesses. Folk Magic in Moravské Kopanice and I Could Do That Too: The Art of Modernity in Comic Books. The Ship of Fairy Tales also attracted a wide readership.

Sixty new publications were uploaded to the **online Munispace reading room**, bringing the total number of available publications to 480. The reading room achieved a total of 11,970 online visits.

Masaryk University Press presented published titles and presented them at book fairs and professional events as well as online using the new university website. University-issued publications also found their way to the Scalanteria shop.

In 2016, the university issued **54 scientific journals**. In addition to editorial and production support, Masaryk University Press provided its services to nine periodicals with respect to inclusion in the Crossref. 618 DOIs were assigned and 15 editorial offices made use of OJS support. Including several journals in world databases may also be considered a success, with four included in ESCI WoS, two in Scopus and five in ERIH PLUS.

As a member of the Association of European University Presses, Masaryk University Press aims to apply current international trends to all of its publishing activities.

Library Services

Library and information services at MU are provided by a library network which includes eight faculty libraries, Teiresias Centre library, University Centre Telč library and dozens of specialized and field-specific libraries. These services are coordinated by the MU Library Information Centre at the Institute of Computer Science. In 2016 MU libraries were actively used by 39,448 registered users who borrowed 672,847 documents, i.e. a total of over 1.6 million library units.

A Strategic Library Development Plan for the 2017–2020 period was elaborated and adopted in accordance with the MU Strategic Plan. Among other things, it focuses on providing more effective support for research and development, ensuring long-term access to key electronic information resources, providing librarians with sufficient training and developing modern library services and technologies.

The widespread availability of high-quality professional electronic information resources (EIR) is crucial with respect to meeting the information needs of researchers, teachers and students. Since most EIRs currently available at the university will be provided by academic consortia only until the end of 2017, MU libraries have focused on ensuring the availability of top EIRs even after the designated end date. MU actively participated in the preparation and implementation of the CzechELib system, developed within the framework of a RDEOP project. Launched on 1 January 2017, the project established a national hub tasked with the centralized selection and acquisition of EIRs for the entire Czech academic community. In cooperation with research departments at individual faculties, MU libraries compiled a priority list of key EIRs proposed for inclusion in the long-term co-financing scheme of the CzechELib centre.

Additional areas attracting a significant amount of attention included support for new models of scientific communication. Not only have libraries been devoted to promoting access to scientific information throughout the university (including e.g. in the area of campaigning against predatory journals), they also teamed up with the Technology Centre of the Academy of Sciences of the Czech Republic to draft a **national Open Access plan**.

Examples of the many activities and events held by libraries in 2016 include e.g. the modernization and renovation of the library foyer at the Faculty of Science, the introduction of a new **Information Skills Seminar** course at the Faculty of Education, the publication of a **handbook on predatory journals** issued by the Masaryk University Campus Library, the organization of a meeting of Czech humanities-oriented libraries at the Faculty of

Social Studies and a series of six educational and cultural events organized by the youngest MU library at University Center Telč.

Publications and libraries in 2016

480
publications available
in the Munispace
online reading room

305expert publications issued by Masaryk University Press

1,530 library units in Braille

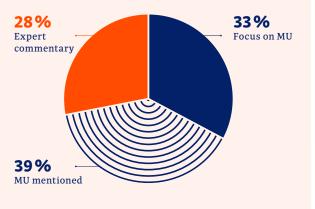
54 scholarly journals published by MU in 2016

11,970visits to the Munispace online reading room

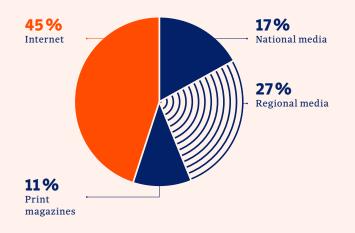
1,644,929 titles available in the MU library collection

39,448
registered users
actively utilizing the
MU library system

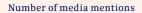
MU media image in 2016 according to article type



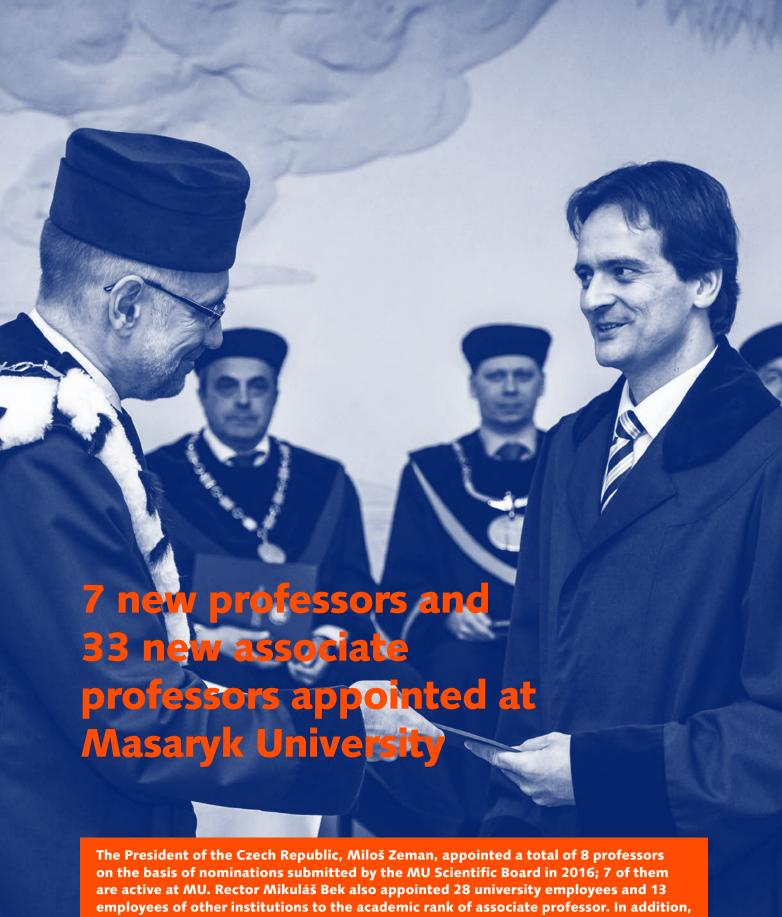
MU publicity in 2016 by media type



Masaryk University-related media output







The President of the Czech Republic, Miloš Zeman, appointed a total of 8 professors on the basis of nominations submitted by the MU Scientific Board in 2016; 7 of them are active at MU. Rector Mikuláš Bek also appointed 28 university employees and 13 employees of other institutions to the academic rank of associate professor. In addition, the MU academic community also welcomed five new associate professors who were appointed following habilitation procedures conducted outside of Masaryk University. In 2016, for the very first time, the appointment ceremony was held in the refectory of the Mendel Museum.

Rector Mikuláš Bek presenting appointment decrees

Strategic Priority:

Personnel Management and Employee Development



9.1

Qualitative Growth, Internal Regulations and Employee Evaluation

9.2

Open Personnel Policy and International Employee Integration

9.3

Employee Training and Benefits

Qualitative Growth, Internal Regulations and Employee Evaluation

In 2016, a total of **41 successful habilitation procedures** took place at MU. University employees accounted for 68% of these while the remainder was composed of external candidates. Newly appointed associate professors included 76% men and 24% women with a mean age of 42 years (32–67 years).

In 2016 the Masaryk University Scientific Board approved 13 proposals for appointment to professor which were subsequently submitted to the Minister of Education, Youth and Sports. All but one appointment concerned Masaryk University employees. In 2016 eight professor appointment procedure were completed, of which seven concerned Masaryk University employees. All newly appointed associate professors were men with a mean age of 50 years (39–65 years).

In 2016, a revised directive on habilitation procedures and professor appointment procedures entered into force at MU. The new directive includes more stringent requirements for the appointment of habilitation and evaluation board members and habilitation thesis reviewers, specifically in order to achieve maximum transparency and provide an independent assessment of each procedure. It also specifies the extent of required documentation, including e.g. information on students supervised by an applicant for appointment to associate professor or professor. In addition to substantive changes, it also introduces a number of formal changes which mainly contribute to the clarity of the directive and to the clarification of individual qualification procedures steps. Associated activities included an analysis of qualification procedures as perceived by individual faculties and fields, carried out in order to identify fields faced with the problem of sustainability in terms of the required number of qualified academics.

In the key internal standards area, two fundamental documents were revised in 2016, namely the MU Internal Wage Regulations and the Selection Procedure Code for Academic and Other MU Employees. Both of these comprehensive standards underwent a year-long university-wide debate and are expected to be released in 2017. A new standard for employee creative leave taking was prepared and also scheduled for release in 2017.

An **adaptation procedure for new employees**, initially launched in 2016, is currently being tested by the Rector's Office. The adaptation procedure significantly supports the effective integration of new employees, helps them obtain information essential for a successful career launch, and – last but not least – helps senior employees organize their incorporation and plan their first assignments. These procedures are designed to help stabilize new employees and strengthen their motivation during

the first stage of their careers at MU. The Rector's Office also launched the pilot stage of a new **jobs systematization** process. During the initial systematization stage, MU described the organizational structure of the economic unit, determined the number of jobs at individual workplaces and stipulated the scope of individual workloads, funding sources, salary ranges relevant to individual positions and indicators designed to provide an enhanced internal and external comparison of wages in view of job market standards.

In 2016, MU continued to develop the **EVAC application**, designed to provide an efficient **employee evaluation system**, especially at the technical level by refining the quality of provided data and by developing existing functionality. The **University Employee Evaluation** conference held in December 2016 tackled a range of associated topics, from general background knowledge and requirements to external inspiration and hands-on experience with evaluation as seen by both employers and employees.

Open Personnel Policy and International Employee Integration

Since 2015, Masaryk University has been implementing the Human Resources Policy Support Programme announced by the Rector. It is designed to financially support personnel policy openness and to thus encourage the recruitment of new excellent academics and other professional employees across MU faculties. The programme is limited to employees who completed their doctoral studies, achieved excellent international results in their field, acquired long-term foreign work experience or made a significant contribution to the implementation of major international science projects. After six faculties joined the programme in 2016, university management approved the creation of 14 jobs, of which 11 were successfully implemented by the end of 2016 according to predetermined

Altogether, Masaryk University employed a total of **687 foreign citizens** in academic, scientific and expert employee positions in 2016. Personnel policy openness and an increase in the number of foreign employees are naturally linked to the need to provide new employees with suitable entry conditions. The **CEITEC Welcome Office** has been active at Masaryk University since 2013. It is a counselling and assistance centre for foreign researchers and their family members who arrive for long-term stays, usually one to five years in duration.

The centre provides assistance in the area of visa and residence permits (comprehensive services in the area of entry permit type selection and application processing, reporting changes and seeking extensions), in-person support for communication with authorities (e.g. foreign police, tax office), accommodation, social and health insurance and health care-related matters. Family members are provided with assistance with locating educational facilities for children as well as with career-related help. The centre also provides information on Czech language courses, employee obligations in the Czech Republic (and in Brno), legal matters and obligations arising from one's stay and further information as requested by individual employees.

In 2016, the CEITEC Welcome Office **provided assistance to a total of 115 people** who participated in **920 consultation sessions focusing on employment and the integration of foreigners.** Thanks to a host of positive responses and in view of best practices, MU decided to expand the centre's activities and **establish a central Welcome Office** at the Personnel Management Office of the Rector's Office in 2017.

9.3

Employee Training and Benefits

Masaryk University strives to develop a comprehensive and all-inclusive employee training system. The search for such a system was carried out at selected international universities and will be followed up by the gradual development of Masaryk University's own educational and training system for both academic and non-academic employees.

One of the first steps taken in this respect is the development of support for teachers' pedagogical competences. The Centre for the Development of Pedagogical Competences is being set up to systematically increase the level of competences associated with the preparation of teaching activities, their execution, the implementation of new technologies, the involvement of students and the evaluation of teaching activities. In 2016 Masaryk University started to develop a special educational program for teachers which specifically dealt with the above mentioned areas. Its development was based on experiences acquired at foreign universities as well as on qualitative research carried out directly at Masaryk University and on activities currently implemented by individual MU faculties. The first training programme is scheduled for implementation by the Centre for the Development of Pedagogical Competences in 2017.

As in previous years, Masaryk University continued to provide its employees with a standard range of **employee benefits**. In addition to providing catering services for employees, either on site or in the form of meal vouchers (total amount of 27.4 million CZK), MU spends significant amounts of money on supplementary pension insurance (14.3 million CZK), preventive care and vaccinations (400,000 CZK) and rewards in recognition of life and career anniversaries (2.3 million CZK).

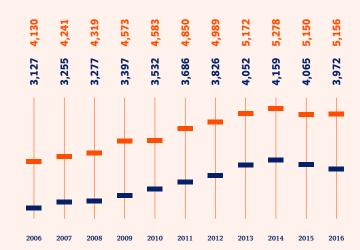
In 2016, a review of existing benefits was carried out in order to gauge interest in their expansion and utilization. In the upcoming period MU thus plans to prepare and discuss the expansion of the benefits it provides while also updating their utilization according to the needs and life situations of individual employees.

Last but not least, one of the goals of the university's personnel policy is to harmonize family and work life. MU is hoping to achieve this by supporting flexible working hours, limited workloads and home office schemes. Non-academic employees are entitled to 30 days of leave per calendar year.

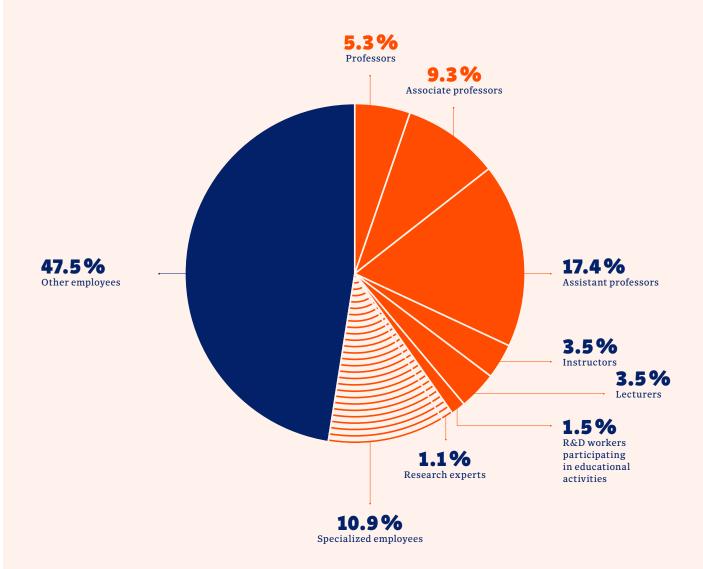
Support for their employees with children is naturally provided by individual faculties and other constituent parts of the university. A **play area for children** at the Faculty of Social Studies in downtown Brno has been in operation for several years. Children are looked after by volunteers and all services are provided free of charge.

MU employees

- Number of employees (headcount)
- Mean full-time employee equivalents



MU employee qualification structure in 2016



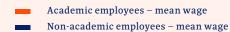
Number of newly appointed associate professors and MU professors

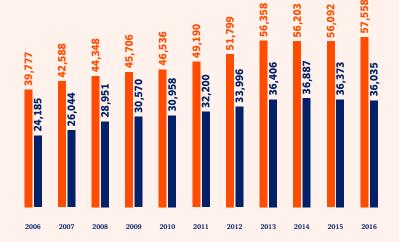
Newly appointed professors at MU

Newly appointed associate professors at MU



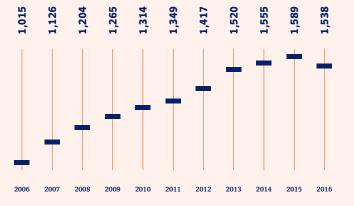
Mean wages at MU





Non-investment revenue per MU employee

Non-investment revenue in thousands CZK per MU employee





Strategic Priority:

Infrastructure and Institutional Management



10.1

Support for Project Preparation and Implementation

10.2

University Infrastructure Development

10.3

Building Management and Operation Efficiency

10.4

Financial Balance Sheet for 2016 10.5

University Budgeting

10.6

Internal Control System

10.7

Provision of Information

10.8

Masaryk University Archives

Support for Project Preparation and Implementation

Throughout 2016 the Office for Development of the Rector's Office provided support for the preparation, implementation and sustainability phases of projects funded by structural funds and development projects. Support services included methodical guidance, i.e. the gradual adjustment of processes associated with the beginning of a new programming period, as well as expert advice on the administration of individual grant schemes for both current and past projects.

The former area included the issuance of an updated version of Guidelines for the Submission of Project Applications to the European Structural and Investment Funds 2014–2020 and the elaboration of project management instructions for the Research, Development and Education Operational Programme (RDEOP). In late 2016, the project management instructions were submitted for an amendment procedure, with publication scheduled for early 2017.

A range of methodological materials and procedures were developed in order to provide individual project teams with adequate support. Examples include a procedure for submitting partnership agreements for signing, content inspection and subsequent registration in the agreements register, a procedure for submitting project applications using the new MS2014+ system, a new electronic document signing system, a procedure for securing the power of attorney for authorized persons and a procedure for setting up work reports in the ISEP system.

Project support priorities for 2016 included the preparation of the MUNI 4.0 strategic project, submitted along with an additional 15 RDEOP projects. The complementary Strategic Education Investment Project (SIMU+) was prepared by a project team at the Faculty of Medicine with the methodical support of the Office for Development.

In 2016 MU participated in the preparation and submission a total of **66 RDEOP projects**, requesting a total subsidy amount of approximately **7.1 billion CZK**. A total of 16 projects seeking 66.5 million CZK were submitted in the Interreg Operational Programmes scheme while 7 projects seeking 42 million CZK were submitted in the Employment Operational Programme.

A total of 118 projects were in the sustainability stage of the discontinued *Education for Competitiveness Operational Programme* while an additional 13 were in the sustainability stage of the Research and Development for Innovation Operational Programme. A further 3 projects were implemented within the framework of the National Sustainability Programme.

10.2

University Infrastructure Development

The investment programme which implements the Masaryk University Strategic Plan is based on Programme 133 210 issued by the Ministry of Education, Youth and Sports of the Czech Republic. Subprogramme 133 21J covers the renovation and completion of the historical premises of the Faculty of Arts at Arna Nováka Street. In 2016, a building permit was obtained and the general building contractor was selected using a tendering procedure. Construction commenced in October, with construction costs disbursed in 2016 amounting to 5.8 million CZK. As a result of the public tendering procedure for the position of general contractor, savings in planned subsidy costs reached 97 million CZK. Allocated state budget subsidies amount to 311 million CZK; an additional 20 million CZK will be provided by MU. The completion of buildings with a total area of 10,300 m² will be the final phase of a complete renovation of the Faculty of Arts. In accordance with applicable laws and regulations, approval for an additional investment plan involving the renovation of a Faculty of Arts building at Joštova Street 13 will be sought under the current programme in connection with the 97 million CZK in achieved savings.

In addition to the above mentioned projects and programmes, Masaryk University itself also financed smallscale investment and construction projects worth a combined sum of 77 million CZK. These included 35 projects such as the renovation of 44 residential units in the A3 block of the Vinařská halls of residence for the Accommodation and Catering Services (7 million CZK), renovation of elevators at the Kounicova halls of residence (3 million CZK), installation of a replacement low voltage source at the Faculty of Science complex at Kotlářská Street (4.7 million CZK), renovation of meeting room No. 201 at Komenský Square, including air conditioning, cooling and interiors (6.5 million CZK), transformation of apartment units into office space at the Faculty of Law (3 million CZK) and additions to air conditioning systems in room A₃₄ at the Faculty of Sports Studies (7 million CZK).

The completion of scientific, research and educational infrastructure will be carried out in parallel with MEYS investment programme No. 133 210 as part of the *Operational Programme Research*, *Development and Education*. A key project scheduled for implementation under RDEOP is the **Strategic Education Investment Project (SIMU+)** which includes several sub-actions outlined below.

SIMU FMed calls for the construction of a complex simulation centre for medical and non-medical fields of study. The building will be located in the parking area of the Morphology Centre building at University Campus Bohunice. Joint documentation for the issuance of a zoning decision and building permit has been completed and a decision on the location of the building as well as a building permit have been issued and entered into force. Presumed construction costs amount to 500 million CZK.

SIMU FEA includes the adaptation of selected faculty classrooms to laboratories suitable for simulation education as well as additional comprehensive renovations of selected lecture halls and seminar rooms. Building permit documentation was completed in 2016; an issued statement specified that construction does not require a zoning decision or a building permit. Presumed construction costs amount to 27 million CZK.

SIMU FSS includes building modifications to three existing simulation education classrooms. Project documentation announcing construction modifications has been completed and consent with the implementation of the declared construction plan has been issued and is in force. Presumed construction costs amount to 2.5 million CZK.

SIMU FEdu includes the construction of a simulation track with elements for the blind and visually impaired in the faculty courtyard. These modifications do not require MU to seek building permits or notify a construction authority. Presumed construction costs amount to 0.25 million CZK.

SIMU FA includes the development of a practice recording and acoustic studio and a sound laboratory. Building permit documentation has been prepared. Presumed construction costs amount to 23 million CZK.

SIMU FSci calls for the boring of a hydrogeological well. Boring a well does not require a building permit or a notification to the building authority; however, the activity will be announced to a District Mining Authority and the Czech Geological Survey. Presumed construction costs amount to 0.25 million CZK.

SIMU Teiresias Centre focuses on providing wheel-chair access to the FA building at Jaselská Street and the FSS building at Joštova Street. Presumed construction costs amount to 6.4 million CZK. A building permit was issued in 2016 and a construction notification was dispatched in the case of the Joštova Street building.

The RECETOX RI project constitutes an addition to the existing A29 building – CETOCOEN at the University Campus Bohunice. The new research infrastructure will help support European environmental policy. The project will result in the construction of an environmental and biological specimen bank, including handling laboratories and staff workspace. From a construction point of view, the facility will comprise two underground floors between the existing A29 building and the INBIT building. A total of 1,099 m² of new floor space will be built. The building will be equipped with an outdoor liquid nitrogen storage station. Expected construction costs amount to 112 million CZK. The building permit was issued in 2016.

The renovation and **expansion of the Botanická Street** complex will provide the necessary facilities for the development of cooperation in education, research and innovation in ICT. Due to the financially challenging nature of the project, its completion will be subdivided into several stages and funding will be sought through several programmes. In 2016, the project was submitted for assessment under the designation of *Information Society – Development of Infrastructure for Research and Educational Purposes* following the previous issuance of a valid zoning decision (January 2010) and an authorized construction announcement (May 2010). The entire project will require an estimated amount of 202 million CZK in investment funding and an additional 20 million CZK in non-investment expenses.

The **CEPLANT bridge** includes building modifications and the construction of new laboratories on the existing premises of buildings o6 and o7 at the Faculty of Science complex at Kotlářská Street. Presumed construction costs amount to 3.6 million CZK. The project preparation phase was implemented in 2016.

A project launched by the Department of Archaeology and Museology of the Faculty of Arts focuses on renovating the existing building of the **Pohansko Research Station**. Overall investment costs amount to 16.5 million CZK. In 2016 work started on the development of building permit documentation.

Building Management and Operation Efficiency

In order to efficiently manage and operate its buildings, Masaryk University has been utilizing building information systems, building management systems and associated technologies for several years.

Building Information Modelling (BIM) refers to the process of developing and managing information relevant to a given building and its technologies throughout its life cycle. For a number of years, MU has been developing and managing building data in the form of digital passport documentation. In 2016 the BIM data repository was updated and supplemented with additional data. New building passport data acquisition was primarily concerned with FEdu, FEA, UCB and ACS. Building passport data updates included FA, FEdu, FLaw, FSS, UCB and the Rector's Office. The acquisition of new passport data was carried out at FEdu, FEA, UCB and ACS buildings; passport data associated with FEA, FA, FSS and FEdu were updated.

Building Information Modelling data are provided to users online via the **KOMPAS application** developed by the Information Systems Division of the Institute of Computer Science in cooperation with the Facility Management Unit of University Campus Bohunice. In 2016 KOMPAS was expanded to provide users with enhanced access to technological passport data as well as better data presentation and expanded search functionality.

The above mentioned applications also contribute to improving building management efficiency. The MU Buildings mobile application, which provides users with a comprehensive overview of all Masaryk University buildings located in Brno, was also released for the ions platform in 2016. Magan allows users to generate graphical output including e.g. blueprints of buildings and selected technologies and utility networks for renovation purposes. New functionality added in 2016 provides users with the opportunity to generate map data necessary for developing fire evacuation plans.

The **Building Management System** (BMS) is an integrated information system designed for the management, monitoring and subsequent optimization of the operation of MU building technologies.

Although the MU BMS was first deployed primarily in newly constructed buildings at the University Campus Bohunice, the architecture of the system allows its gradual expansion to other buildings as well. The components of individual building technologies (heating, cooling, ventilation, lighting, CCTV, fire protection, security systems, etc.) are connected to the technology network and communicate through the open Barnet protocol, which has the **capability to integrate** different manufacturers' **technologies into one comprehensive system**. At pres-

ent, BMS is capable of integrating components made by Delta Controls, Saia Burgess, Honeywell, Johnson Controls, Siemens, Wagon and others.

Activities associated with the development of MU BMS include consultancy and inspection activities performed during the course of design and deployment of technologies to individual buildings. Methodologies essential for the development of MU BMS which are provided to suppliers as part of selection procedures were updated in 2016.

As part of *Central Facility Management*, MU carried out a review of existing **integrated operational services**. Based on the outcomes of the analysis, additional suitable services were selected for integration into Central Facility Management in order to achieve more efficient operation. These include in particular services in the area of occupational safety and health, fire protection and energy management.

Financial Balance Sheet for 2016

10.5

University Budgeting

Masaryk University's **total non-capital earnings** for 2016 stood at **6,110 million CZK** (down by 350 million CZK in comparison with 2015) with costs amounting to 6,044 million CZK.

MU management registered an economic result of 66 million CZK after tax (i.e. 1.08% of total MU revenue). Non-capital contributions and subsidies from the relevant chapter of the Ministry of Education, Youth and Sports totalled 3,238 million CZK (an interannual increase of 7%) while contributions and subsidies from other state budget chapters and local authority budgets stood at 537 million CZK (an increase of 9%)

A sum of 245 million CZK was gathered from abroad (down by 21 %). Public resources from the national budget and from abroad contributed a total of 4,057 million CZK (interannual decrease of 1.5 %). Non-capital investment funding provided by the Ministry of Education, Youth and Sports in 2016 for institutional support amounted to 2,265 million CZK, i.e. 37% of total MU revenue. Non-capital subsidies for teaching activities (indicators A+K) stood at 1,700 million CZK (down by 1.63 %); MU received an additional 565 million CZK in targeted institutional support (up by 6.8 %). A total of 37 million CZK worth of non-capital subsidies for student accommodation and catering was also provided by MEYS (interannual increase of 2 %).

Non-capital research and development funding (normative and targeted) amounted to 1,653.5 million CZK (up by 17%): a total of 1,082 million CZK was provided by MEYS (up by 36%), 477 million CZK came from the national budget as well as local and regional authority budgets (up by 8%); international research received an additional subsidy of 94 million CZK (down by 5%) and RDIOP subsidies amounted to 464 million CZK. Non-capital research and development funding amounted to 35% of total Masaryk University revenue in 2016.

MU revenue from non-public sources amounted to 2,073 million CZK in 2016 (up by 4% compared to 2015): 1,931 million CZK comprised revenue from principal university activity (up by 4%) and 142 million CZK from supplementary activities (down by 3%). Self-generated income and income from supplementary activities amounted to 34% of the total non-capital revenue.

An inventory conducted by MU in 2016 shows **total assets** with a purchase value of **16,468 million CZK**, of which 16,147 million CZK in long-term tangible assets and 321 million CZK in long-term intangible assets. Total depreciation of assets amounted to 5,794 million CZK. The total degree of depreciation stands at 35%.

A fundamental change in **MU budgeting procedures** took place in 2017, with a different percentage of the fixed and performance-related parts of the educational activity contributions allocated in comparison with the *Rules for Granting Contributions and Subsidies to Universities by the Ministry of Education, Youth and Sports for 2017 (hereinafter referred to as "MEYS Rules").*

The current version of the MEYS Rules clearly attempts to lock the amount of funding provided to individual public higher education institutions (HEIs). By increasing the proportion of the fixed part to 90 %, MEYS has reduced the amount which individual HEIs are able to acquire through competitive procedures.

As part of the budget preparation process in 2016, several options for 2017 budgeting procedures were modelled and subsequently discussed by various university boards. The impact of proposed options on the well-being of individual economic units was analyzed in detail. In accordance with the MU Strategic Plan, the university selected an option which reinforces the performance-related part and emphasizes support for science and internationalization.

The selected option sets the share of the performance-related section of budgetary chapter I according to 2016 guidelines, i.e. at 24 % rather than at the 10 % stipulated by MEYS Rules for 2017. Furthermore, the weights of individual performance indicators were adjusted as follows: Graduate Employment: 5 % (MEYS: 10 %), Foreigners: 10 % (MEYS: 8 %), Final Theses in Foreign Languages 3 % (new MU indicator), Mobility Programmes: 30 % (MEYS: 20 %), Graduates 5 % (MEYS: 15 %).

The above clearly illustrates that MU has reduced the weight of the Graduates and Graduate Employment indicators. At the same time, the **weight of indicators focusing on internationalization**, i.e. the number of foreigners and outgoing and incoming students participating in mobility programmes, has **increased**.

The calculation of the Foreigners indicator was altered and a new **Final Theses in Foreign Languages indicator** was introduced. In contrast with MEYS, the Foreigners indicator also includes self-paying students, which thus compensates for the cancellation of last year's Internal Income indicator which formerly included revenue from self-paying students. Furthermore, the Foreigners indicator does not include Slovak citizens but only those foreigners who require teaching activities to be held in a foreign language. The Final Theses in Foreign Languages indicator describes the proportion of defended final theses in a foreign language at individual faculties, excluding theses in philological fields of study and theses written in Slovak.

Internal Control System

10.7

Provision of Information

The principal component of the Masaryk University **internal control system** is the financial inspection system established in accordance with Act No. 320/2001 Coll. on Financial Control in Public Administration, as amended, and Decree No. 416/2004 Coll. An internal audit forms a second key component.

The efficiency of the internal control system at MU is ensured especially by an integrated methodology framework, clear allocation of roles and competencies in all project management areas and a transparent risk management system. Additional strengths include a highly functional electronic workflow and transparent electronic financial inspection system.

Internal auditing is performed in accordance with the above mentioned Act on Financial Control, the MUInternal Auditing Statute and international auditing standards. Internal auditing includes the continuous monitoring of the MU internal control system, the implementation of adopted measures and the risks arising from external public administration inspection activities. In all project audits, the primary objective is to assess the functionality of the internal control system, both in terms of system set-up according to individual process areas and for each individual financial operation. At the same time, the severity of any findings is assessed in relation to the significance of the risks and the degree of functionality and adequacy of the established systems. For error quantification purposes, the internal audit takes into account risks associated with a breach of the budgetary discipline resulting from external audits.

A majority of all auditing activity carried out in 2016 included project auditing linked to Research and Development for Innovation projects. Their subject matter also focused on risks associated with the sustainability of these projects. No apparent risk potential or any significant errors were established, as confirmed by the outcomes of public administration inspections.

In 2016, a sum of approximately 2.2 billion CZK was inspected by 15 control subjects as part of 52 external inspections and project audits. Of these, 45% comprised operational programme projects. A breach of budgetary discipline was established in no more than 0.1% of sample materials (worth approximately 7.9 billion CZK) inspected in the 2011–2016 period.

In view of internal auditing outcomes, management control and external controls, it may be said that the key financial control requirements, i.e. the four eyes and two signatures principles, have been met throughout the entire financial operation procedure and that risk has been kept at a reasonable minimum.

No corruption was proven at Masaryk University.

Provision of information pursuant to Act No. 106/1999 Coll. on Free Access to Information: The vast majority of information provided had been requested in person from MU employees according to a given individual's responsibility for areas in which the information was requested; in accordance with section 13 of the Act, such requests have not been recorded. Requests processed in this manner include e.g. 737 requests for information sent to the default MU e-mail address info@muni.cz and over 4,000 additional requests sent to prihlaska@muni.cz, an address dedicated to communication with applicants for studies.

Written requests are subject to regulations set up in accordance with section 5, subsection 1, letter b) of the Act. For more information see www.muni.cz/general/information_providing/mu_regulations.

A total of 11 written requests concerning the provision of information were filed in 2016. All requests were processed within the statutory period.

No court motions or proceedings associated with potential failure to provide information by MU in accordance with the Act were recorded in 2016. Likewise, neither MU nor any of its employees were subject to any sanctions for potential violations of the Act.

Masaryk University Archives

The university archive is an accredited specialized archive included in the network of public archives of the Czech Republic. It is tasked with **safeguarding archival materials as well as with processing them and providing public access**. A total of 17 discarding proceedings took place in 2016, providing the MU Archives with the opportunity to examine 208 metres of documents, of which 134 metres were subsequently included in collections. This was the largest annual increase achieved to date, which thereby confirms a tendency seen in part years, i.e. a tendency for larger volumes of newly arriving materials.

In addition to the discarding proceedings, 2 personal collections and 2 additions to these collections – amounting to under 7 metres – were also obtained. Valuable acquisitions included the collections of archaeologist and museologist Vilém Hrubý and German language scholar Zdeněk Masařík; newly supplemented collections include those of Arne Novák and Vladimír Spousta. Intensive organizational work took place throughout the year, with nearly 100 metres of archive materials processed. The long-awaited personal collection of leading physiologist Vladislav Kruta was inventoried and made accessible to the public.

The launch of the new **archiv.muni.cz** website, which replaced the previous unsatisfactory version, constitutes a significant advance in online presentation, access to information and archival search services. The scope of services offered to the public expanded dramatically following the site launch. Furthermore, inventories and lists enabling researchers to access frequently visited personal collections were digitized. By the end of the year, over a quarter of these tools was made available. Following the overhaul of the MU website, the section on university history was transferred to the website of the MU Archives, in effect **supplementing university history with additional archive sources**.

The total amount of materials stored in archival collections was nearly 2,300 metres. The processing rate remains very good, with 88.5 % of all materials processed and 48.7 % inventoried. **The MU Archives rank among the most accessible archives in the Czech Republic.** A total of 68 researchers visited the Archives in 2016 on 220 separate occasions. In addition, 213 official and 45 private collection searches were conducted.

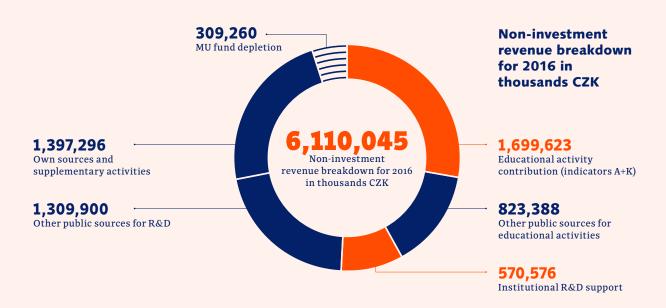
Besides providing photographs and archival materials for publishing activities (predominantly to periodicals), the archive helped organized an **exhibition dedicated to Karel Engliš**, held at the Faculty of Law library during the Days of Law event. The MU Archives' exhibition spaces at Komenského nám. 2 were successfully renovated

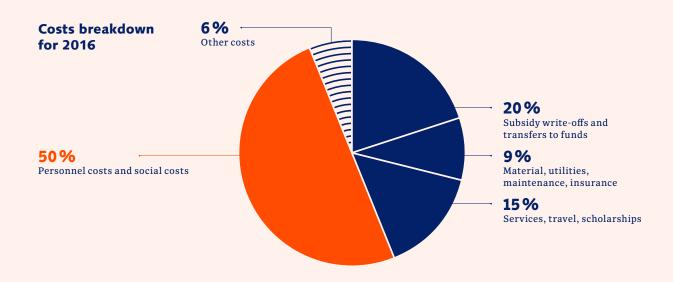
and modernized in collaboration with the Department of Art of the Faculty of Education. The archive continued to cooperate with the South Moravian regional authority, e.g. organizing a guided tour of the archive premises and presenting the university's history.

Total non-investment MU revenue

Non-investment revenue in thousands CZK







Investment expenditures at MU

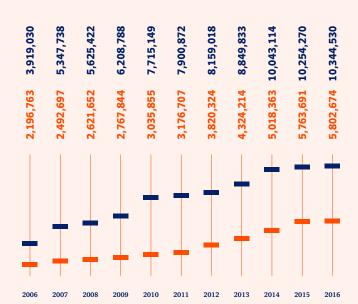


Investment expenditures in thousands CZK

Immovable and movable MU assets in thousands CZK

Immovable assets

Movable assets



MU facilities with year-round use in 2016

123

Useful area of these facilities

420,188 m²

Net useful area of these facilities

205,471 m²

Classrooms and laboratories

58,006 m²

Outdoor sporting grounds

9,309 m²

Libraries, archives, reading rooms

9,585 m²



Masaryk University launched the first university career portal in the Czech Republic

JobCheckIN is designed exclusively for students and recent graduates. The key element differentiating it from regular job search sites is a sophisticated system capable of pairing job offers with prospective employees. In the first few months of operation the system was used by over 100 companies offering over 400 jobs to students in a range of fields.

Strategic Priority:

Information Systems and IT Support



11.1

Information Infrastructure
Development and
Information Systems

11.2

Masaryk University Information System

Information Infrastructure Development and Information Systems

Masaryk University's information infrastructure is managed by the Institute of Computer Science (ICS). It is based on a core **optical cable network of over 135km** which interconnects all university locations. The network backbone has a throughput of 10 Gbps; selection procedures and cable adjustments launched during the course of 2016 were designed to increase the bandwidth to 3x40 Gbps by 2017. The ICS manages nearly 450 active elements, 22,000 outlets and almost 1,000 wireless access points. Thanks to the eduroam concept, network access is also provided to incoming students and academics; of the total of 70,000 connected users, approximately 40 % were from outside the university.

Computing and storage systems, a key component of the MU e-infrastructure, are gradually being transferred to cloud infrastructure. The infrastructure currently hosts over 620 virtual servers running basic services and systems including university websites. It is also used for teaching and research purposes across MU. Since the end of the year, the ICS has launched a pilot run of Open-Stack cloud which provides users with an accessible interface and which closely matches public cloud computing options such as Amazon EC2 or Google Cloud Platform. Computing and storage services are further supported by the CERIT-SC research infrastructure capacity which utilizes over 5,100 computing cores and approximately 5 000 TB worth of storage capacity.

A comprehensive university-wide **transition to Windows 10** was implemented thanks to a free upgrade of all workstations. A total of 1,357 centrally administered workstations out of a university total of 2,840 were thus running Windows 10 by the end of 2016. The transition to Windows 10 included **support for a fully English-language environment in all computer rooms**.

MU also began to extensive utilize the **Office 365 cloud environment (O365)**. Standard support for Exchange and Sharepoint has been extended to other applications such as Yammer and Skype for Business. As part of the preparation of a new MU communication platform, the ICS launched the process of fully integrating **O365** into the university identity environment while ensuring **access to all members of the academic community**.

MU e-infrastructure security is provided by the CSIRT-MU security team, certified as a Trusted Introducer in 2016 as the first such unit in the Czech Republic. Automated tools helped CSIRT-MU capture and actively suppress nearly 116,000 attempts at disrupting the security of the university network (an increase of approximately 30,000 in comparison with last year). CSIRT-MU also offers active penetration testing services. The consolidation of

authentication and authorization infrastructure using the Perun system jointly developed with CESNET also continued throughout the year.

All university administration matters in the area of economics, personnel, wages, research, asset management and operation are fully supported by the MU economic-administrative information system. The system comprises two closely interconnected subsystems, i.e. EIS Magion (supplied by Magion System a.s.) and INET MU (developed by the ICS) and also includes the web-based GIS Kompas system (also developed by the ICS). Magion consists of economic, property, personnel and wage modules and is utilized by 741 MU administrative employees. On the other hand, INET – designed for the entire university community – has 31,000 active users.

EIS Magion development takes place in cooperation between seven universities participating in the MagNet network coordinated by MU. In 2016, Magion development responded to changes in legislation as well as to selected operational requirements. A comprehensive adjustment of records of contracts and orders took place in connection with the national Agreement Register and the Internal MU Agreement Register while adjustments of economic modules were carried out as required by electronic sales records legislation. The storage and depreciation calculation modules underwent major revisions and modifications while the VAT settlement feature of the assets module was expanded and personnel and wage modules were subject to a number of partial modifications including the inclusion of project reporting support for Employment OP and RDEOP.

For INET, 2016 was a key year with respect to its application outside of MU: the system was deployed in pilot mode as a comprehensive set of personnel and wage applications at the University of West Bohemia in Pilsen. MU also continued to support systematic internationalization and the development of the paper-free office environment. The shift towards electronic administration primarily focused on asset management and human resources management: expanding asset decommissioning to include batch operations and localization at economic unit level, validating inventory lists, executing university-wide vacation scheduling, collecting and approving applications for learning agreements, automatically transmitting annual EVAC employee evaluations to human resources, linking human resources with health insurance records and pairing training records with travel orders. In the area of economics, INET responded to requirements posed by the national Agreement Register by modifying DNS applications and framework contracts.

Masaryk University Information System

The Faculty of Informatics-based ICS is responsible for all study-related administrative procedures at the university; the **MU Information System** may be accessed at http://is.muni.cz/. The system comprises a number of administrative and communication services, electronic study support, publicly accessible courses, science and research services, alumni services, online Shopping Centre, thesis, publication and document depositories and registers of electronic applications, administrative tasks and agreements.

New features developed in 2016 aimed to support the needs of the university and its users in accordance with modern technological trends. Selected services and applications adopted a responsive design scheme in order to facilitate the handling of **applications using mobile devices**. A new IS MU login system has ensured a higher level of user password security. The File Service application encouraged the shift to electronic administration across a range of internal processes in a further step towards a paper-free university.

Continued development of the Bureau application facilitated a shift towards a fully **electronic study administration** as well as the fulfilment of obligations resulting from the amended Higher Education Act including a requirement to connect the Bureau with processes and obligations associated with the non-publication of final theses.

The Course Catalogue was completely upgraded according to faculty needs and in accordance with design requirements. Course management processes – including batch course operations – were significantly simplified.

Overhauled applications such as Lists of Topics, Timetable and Student now provide users with simplified orientation, new control mechanisms, interactivity, **bilingual features** and other benefits. In particular, development has focused on making it easier to use individual agendas, including on mobile devices. As part of its unified visual style, Masaryk University launched a **responsive design** pilot project: **Life at MU** provides users with a summary of up-to-date information including study-related event information, message boards and discussion forums, news from various MU units and articles published in MU student magazines.

E-learning tools were significantly adapted in order to provide both teachers and students with a more convenient examination experience. Adaptations to these tools included visual changes in applications dedicated to response sheet corrections, an expansion of ROPOT PDF export options, the stabilization of ROPOT evaluation algorithms and changes to notebook editing.

Thanks to the new **E-Courses** application, which provides **online courses to the public**, the MU e-learning system now includes support for the access of unauthorized persons. E-courses support both lifelong learning and educational and competitive projects for secondary school students.

In 2016, MU held the **sixth annual Open Space E-Learning Conference**, dedicated primarily to the use of videos for teaching purposes. The conference was attended by a record-breaking 140 MU employees and doctoral candidates.

The **MU Shopping Centre** achieved a turnover of 164 million CZK. Its design was completely changed and customized for improved mobile device handling. A new, modernized version of the interface was created for external systems, e.g. for conference usage.

The **Bureau** application registered **143,127** files comprising **167,429 documents** in 2016. Document processing is governed by a total of 1,124 user-tailored agendas. A total of 24,266 users were actively engaged in working with these documents. The system was modified to include support for the registration and approval of internal MU standards, an interface for connecting documents to the Information System for Projects Management and support for disciplinary proceedings records. The gradual shift towards the digitization of study-related faculty agendas continued throughout the year. Electronic signature usage was expanded to include additional Rector's Office and faculty agendas.

As one of the first universities in the Czech Republic to do so, MU launched an **Internal Agreement Register** in order to fulfil its legal obligation to publish all agreements. In accordance with the new the Agreement Register Act, the register automatically transfers documents to the national agreement register operated by the Ministry of the Interior of the Czech Republic. Not only does it provide access to documents in an open and machine-readable format, it also enables authorized persons across the university to efficiently locate and record relevant agreements. From the date of the Act's entry into force until the end of the year, a total of **1,459 agreements** were registered.

The IS MU development team operates the **Theses.cz**, **Odevzdej.cz and Repozitar.cz plagiarism detection systems for 58 institutions** and continues to further develop these systems. The complete transformation of the Odevzdej.cz interface into a new responsive design completed in 2016 provided users with intuitive and convenient tablet or mobile device access. Several new features were also added with respect to display options. A total of **25 institutions** are now involved in the **PravyDiplom.cz** diploma verification system.

www.muni.cz

3,160,000 visits in 2016

Number of emails sent at MU

million
emails delivered in 2015
(approximately 120,000 emails per day)

65 million emails rejected for security reasons

million
emails delivered in 2016
(approximately 110,000 emails per day)

65 million emails rejected for security reasons

145,400

documents in 2015

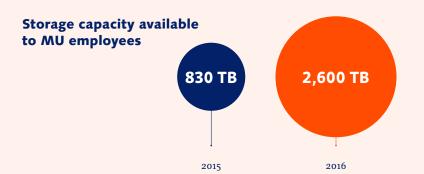
(i.e. **60 %** of a total number of **243,300** documents)

152,300

documents in 2016

(i.e. **63 %** of a total number of **242,900** documents)

Number of documents in Inet and Magion systems electronically signed using the signature book application



Turnover in the SUPO

141 million CZK turnover in the SUPO payment system

987,654,943

Total number of IS MU visits

59,587Total number of regular IS MU users

76,399
Total number of occasional IS MU users

4,561 139Maximum number of IS MU pages opened in one day

As of 31 December 2016, the IS MU data pool held ca.

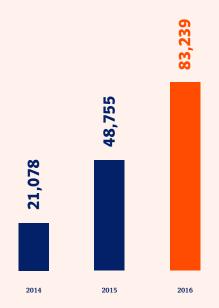
105 million files amounting to a total of 21.5 TB.

IS MU data is recorded in a total of **2,236** database tables subdivided into **180** categories. Total number of scripts (individual programmes) in the IS MU: **2,728** Number of IS MU source code modifications: **6,363** Maximum server performance: **1,134,036** requests processed per hour.

Total server downtime: approximately **10** minutes.

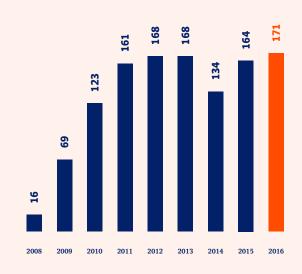
Electronic application processing using the records service application

Number of purely digital documents



MU Shopping Centre turnover

Turnover in millions CZK





MU Faculties and University Institutes



12.8	12.4	12.1
Faculty of Social Studies	Faculty of Arts	Faculty of Law
12.9	12.5	12.2
Faculty of Sports Studies	Faculty of Education	aculty of Medicine
12.10	12.6	12.3
Central European Institute of Technology	Faculty of Economics and Administration	aculty of Science
12.11	12.7	

Faculty of

Informatics

Institute of

Computer Science



12.1 Faculty of Law

The faculty's core field of study is Law, implemented within the **Law and Legal Science** Master's degree programme designed to provide the necessary knowledge and skills to future judges, lawyers, prosecutors and notaries. Bachelor's degree programmes focus primarily on public administration (Public Administration and Theory, Legal Specializations) and on specializations in various legal areas (Commercial Law Studies, International Commercial Law Studies, Senior Officer of Justice).

On the other hand, the Master's **Public Administration** degree programme reflects a demand for specialists dedicated to the legal aspects of public administration and governance. Demand for this programme is traditionally highest while also being the most selective.

The **Theoretical Legal Sciences** doctoral degree programme offers both full-time and combined studies in 11 fields of study taught in Czech, one field of study taught in Polish (Prawo Finansowe i Nauki Finansowe) and three fields of study taught in English (International Private Law, International and European Law and Law Information and Communication Technologies).

Successful faculty undertakings include **summer school** events dedicated to inheritance law through the ages and commercial law as perceived by the economic analysis of law and as well as the *Autumn School of Legal Writing*.

In the area of **internationalization**, both academics and students had the opportunity to expand their skills and knowledge of international law by visiting partner institutions abroad. The faculty is cooperating with over one hundred foreign law faculties within the framework of the ERASMUS+ exchange programme. Over 130 students make use of mobility programmes, with approximately 70 international incoming students coming to MU to study law each year. Incoming students may choose from over 90 courses, most of which are taught in English. Intensive specialized courses taught by renowned foreign lecturers are also available for the ever increasing number of incoming international students.

The faculty is a member of the European Law Faculties Association (ELFA), founded in 1995, the Rotterdam Law Network, which comprises 31 law schools faculties from 24 European countries, and the International Association of Law Schools (IALS).

The faculty's and long-standing collaboration with the John Marshall Law School (JMLS) in Chicago is unique among partnerships with foreign institutions. This collaboration has led to the establishment of the annual Days of the US Law event, where JMLS professors present selected US law to Czech students. This is followed by the Autumn School of Legal Writing which allows students to delve deeper into the art of legal writing.

A total of **9 scholarship programmes** are awarded by the faculty, including an extraordinary scholarship for students providing legal assistance to applicants for international protection and other groups of foreigners.

Throughout the year, the faculty successfully endeavoured to meet its stated goals aimed at supporting **science** and research, especially in the form of research project implementation. A prestigious and extraordinary **European Research Council (ERC)** was launched and six additional projects secured funding from the Czech Science Foundation for an upcoming period, i.e. in addition to projects which were already underway. The faculty continued to implement community programs projects while also raising funds for the further development of science and research, especially from EU Structural Funds via RDEOP project applications.

Faculty scientific activities included **several highly respected international conferences** including *Days of Law, Cyberspace, COFOLA*, and a special-purpose conference on the amended Higher Education Act, co-organized with the Ministry of Education, Youth and Sports.

The faculty-issued **Journal of Jurisprudence and Legal Practice** was included in the ERIH PLUS (*European Reference Index for the Humanities*) database on 7 October 2016. Throughout the year, open access publications were continuously added to the science.law.muni.cz website.



12.2 Faculty of Medicine

Despite the demographic developments, the number of applicants for studies at the Faculty of Medicine still greatly exceeds its overall capacity. In 2016 the faculty registered 3,382 applications in the field of **General Medicine**. Of the 397 students who were admitted, 150 were granted admission on the basis of excellent secondary school results. A total of 1,269 secondary school graduates applied for **Dentistry** in 2016; 61 were admitted, of which 38 on the basis of excellent secondary school results. In 2016 a group of the most talented General Medicine students was once again selected for participation in the **P-pool** programme where motivated undergraduate medical students underwent expanded scientific training. In accordance with a new accreditation system, study timetables for four semesters were developed for the **OPTIMED** 2 programme.

The Faculty currently also offers a three-year-long Bachelor's degree programme **Specializations in Health Science** (fields of study: Physiotherapy, Dental Hygienist, Nutrition Therapist, Optics and Optometry, Orthoptics, Radiology Assistant, Laboratory Assistant, Paramedic), **Nursing** (field of study: General Nurse) **Midwifery** (field of study: Midwife) and a two-year-long follow-up Master's degree programme **Specializations in Health Science** (fields of study: Physiotherapy, Intensive Care, Nutritionist, Optometry). As part of a strategic RDEOP project co-ordinated at MU management level, the faculty prepared initial input materials for the launch of the new **Embryologist in Health Care** field of study.

With regard to **internationalization**, the faculty added the non-medical field of Nursing to General Medicine and Stomatology, i.e. fields of study which have been accredited in English for a number of years. In 2016 these fields of study attracted hundreds of international students from a total of 51 countries including from 16 EU member countries.

The faculty also offers studies to US citizens thanks to the approval of Masaryk University's application for a study loan programme by the United States Department of Education in 2013. Without this form of accreditation it would have been virtually impossible to enter the American university market and attract not only US students to Master's degree programmes taught in English, but also young scientists to postgraduate study programmes.

The faculty also approved a scholarship programme in support of students who successfully pass the **United States Medical Licensing Examination** (USMLE). The three-tier examination requires the acquisition of a medical license in the United States. Approximately 10 FMed students manage to complete the examination each year. The faculty also finances a scholarship programme in support of the participation of doctoral candidates in professional events and internships in the Czech Republic and abroad. During the course of each academic year, dozens of undergraduate students take part in semester-long or longer placements within the framework of the Erasmus+/ Freemover programme.

The faculty maintains a stable level of scientific quality. A total of **6 new associate professors were** and **2 professors were appointed** in 2016. A further 10 habilitation and 3 professorship procedures are currently underway. In 2016, a total of 57 students successfully completed their postgraduate studies at the faculty. The high number of successful graduates, especially in combined studies, also constitutes evidence of a positive trend.

Of 42 projects submitted to the **Czech Health Research Council**, the faculty was granted funding for 7 investigated projects and a further 4 where it played the role of co-principal investigator. The faculty thus received funding for a total of 11 projects, representing a success rate of 26 %. The total allocated sum in support of successful projects stood at nearly CZK 89 million for the entire period of their duration. In addition, the faculty received approximately 25.5 million CZK for 4 projects from the Czech Science Foundation. Successful doctoral studies graduates are eligible for participation in the faculty-organized Junior Researcher project. In 2016, a total of 15 projects were thus supported by a total of 7 million CZK.



12.3 Faculty of Science

As of 31 October 2016, a total of 3,784 students were enrolled at the Faculty of Science. Biology and Biochemistry traditionally remained among the most popular fields of study. In 2016, 4,646 applications were submitted, 2,574 applicants were admitted and 1,438 applicants subsequently enrolled in studies at the faculty, including 134 students who enrolled in a doctoral degree programme.

The faculty also provided **interfaculty study** opportunities in collaboration with the Faculty of Education, Faculty of Arts, Faculty of Informatics and Faculty of Sports Studies. A collaboration with the Brno University of Technology helped launch the Advanced Materials and Nanosciences doctoral degree programme and a joint venture with Mendel University provided students with the opportunity to enrol in the Life Sciences doctoral degree programme.

The faculty also managed to obtain accreditation in English for all nine of its doctoral degree programmes as well as for two Master's degree programmes and one Bachelor's degree programme.

In 2016 the faculty employed 89 foreign nationals, including 26 academic employees. A total of 138 students participated in international placements while the faculty welcomed 132 incoming international students. Throughout the year, the faculty registered 562 international academic placements (stays of over 5 days) and 30 international academic employees visited the faculty. The faculty strives to constantly create **conditions for the employment of top foreign employees**, utilizing e.g. projects funded by national and international providers.

In order to finance **science and research**, the faculty acquired a sum of 538.891 million CZK in institutional and special-purpose funding as well as an additional 36.846 million CZK from EU Structural Funds (RDEOP). Research centres developed in the previous programming period (CETOCOEN and CEPLANT) also received funding from the National Sustainability Programme. Four projects promoting excellence in primary research funded by the Czech Science Foundation were investigated; in addition, the faculty functioned as principal or co-principal investigator in six large research, development and innovation infrastructure projects. In 2016 **five EU-funded Horizon 2020** projects also were implemented at the faculty.

All in all the faculty is involved in the investigation or co-investigation of **268 projects**. Scientific teams at work at individual departments operate with budgetary autonomy. A sum of 51,322 million CZK was dedicated to financing specific research projects – research carried out by students – in 2016. In 2016, the faculty focused on preparing operational programme projects scheduled for implementation under OPEIC, RDEOP and Horizon 2020.

As in previous years, the faculty sought to promote an interest in university education and research in the natural sciences and mathematics and to contribute to the transfer of knowledge and experience between university educators and talented primary and secondary school students. The faculty aims to develop a network of collaborating academics, university students, elementary and secondary school teachers and science enthusiasts in order to also introduce science into extracurricular educational activities. These efforts are funded in part by the faculty and in part from external financial sources. Thanks to the support of the South Moravian Centre for International Mobility, faculty teachers and students supervised a total of 19 Secondary School Scientific Activity projects in 2016. Traditional faculty-organized correspondence seminars for talented secondary school students (e.g. BrKoS and ViBuCH) were supplemented by the InterSoB competition and the Physics Cafe, a traditional meeting of teachers and physicists. Activities for the general public are frequently held at the **Botanical Garden**; its premises - including greenhouses - are publicly accessible and regularly host exhibitions and other events.

The faculty is dedicated to cooperation with companies, e.g. in the form of joint projects and **contract research**. Contract research services are also provided by the faculty to public authorities such as the Ministry of the Environment.



12.4 Faculty of Arts

The Faculty of Arts offers the **largest choice of fields of study at the university**. In addition, most individual fields may be combined at will to form double-subject studies. The extensive range on offer includes philological fields as well as humanities fields such as history, philosophy, psychology, religious studies, visual art studies, information studies and media studies.

In accordance with its strategic plan, the faculty has also launched a series of **online course modules** focusing on selected humanities topics. In doing so, the faculty has utilized previously developed infrastructure designed to provide support for new technologies in teaching activities, e.g. in the form of e-learning platforms. Individual course modules are based on videos, usually presented in the form of a student–expert discussion, supplemented by testimonies of students enrolled in a given field. The platform includes written materials and verification tasks and provides participants with the option to engage in direct communication with teachers.

In 2016, the faculty focused on the internationalization of teaching activities, in particular by utilizing institutional development resources to support the development of courses taught in English. Providing teachers and students alike with information about available mobility opportunities was also a priority. In order to collect mobility-related data in an efficient manner, the faculty instigated the creation of university-wide electronic records of incoming international visitors. In the area of doctoral studies the faculty highlighted its support of international mobility programmes by awarding mobility scholarships and supporting four international doctoral seminars. A great deal of attention was paid to the faculty's international presentation. Faculty representatives attended education fairs in Moscow and Seoul and visited several Chinese universities in preparation for the signing of collaboration memoranda. In June and July the faculty held the first annual summer school entitled Central Europe: A Birthplace of Modernity. The first year of the event was attended by 17 international students and 4 Czech scholarship holders.

In the area of science and research, the number of proposals approved by the **Czech Science Foundation** increased from the usual five to seven projects in recent years to a total of **16 supported project proposals** in 2016.

The faculty also focuses on the internationalization of scholarly publishing activities, providing a sum of 1,417,000 CZK in support of the publication of 5 monographs, 23 monograph chapters, 35 studies and journal articles, 6 English language journal issues and 3 monograph translations in various prestigious journals and with respected international publishers.

In the area of **applied research** the faculty managed to launch a system of on-line tools and mobile applications facilitating the teaching of Czech for foreigners as well as *Zooapplication*, an application developed in collaboration with the Brno Zoo and dedicated to providing information, fun facts and animal stories.

A cooperation between historians and the Brno Municipal Archives led to the publication of another volume of the *History of Brno*. With respect to its emphasis on quality, the faculty also introduced a scholarship in support of **outstanding doctoral candidates**.

In 2016, the Faculty of Arts joined the European Researchers' Night event traditionally held at Masaryk University. The faculty prepared a total of 17 events and welcomed over 500 visitors.

The *Migration, Minorities and Intercultural Dialogue* project, a series of lectures for the general public, was organized in cooperation with the faculty academic senate. The lecture cycle was designed to provide historiographic and religious perspectives in the public debate instigated by the migration crisis.

In 2016 the faculty also hosted *Humanities Week*, which was part of the UNESCO celebrations of World Philosophy Day. The event was inspired by the 400th anniversary of the deaths of William Shakespeare and Miguel de Cervantes.



Faculty of Education

A total of 7,574 entrance applications were submitted in admission procedures for **81 fields of study** of offer by the faculty in the 2016/2017 academic year. The overall student population stood at 5,014: 2,852 students were enrolled in Bachelor's, 535 in long-cycle Master's, 1,463 in Master's degree programmes and 164 in doctoral degree programmes. Twelve students were enrolled in foreign-language programmes.

In 2016 a great deal of attention was paid to the preparation of accreditation applications which were subsequently submitted for almost all fields of study taught at the faculty. Of the submitted 113 applications, accreditation was granted to 105 fields.

A comprehensive module of courses taught in English was newly introduced and several seminars focusing on the **development of competences in the field of internationalization** were held for the benefit of academic employees.

The faculty welcomed 76 incoming international students. The number of outgoing students who completed an international study or work placement in 2016 stood at 190.

With respect to science and research, the faculty organized 13 scientific conferences, 9 of which were international and 6 with more than 60 participants.

Research projects investigated in 2016 included 8 Czech Science Foundation projects, 24 Masaryk University Development Fund projects and 5 development projects funded by Ministry of Education, Youth and Sports. One RDEOP project was investigated and an additional four project applications were accepted for implementation. Furthermore, 11 specific research projects and 1 interdisciplinary research project (supported by the Masaryk University Grant Agency) were processed.

The faculty also investigated 11 international Erasmus+ projects and projects funded by TEMPUS, the International Visegrad Fund, Norwegian Funds, CEEPUS, Mobility Action Czech Republic—Austria and the Czech-Polish Forum. Academic employees were invited to participate in various international Mobility and AKTION projects.

The FEdu scientific board met on three separate occasions in 2016. The successful habilitation of Petr Knecht in the field of Pedagogy was followed by the approval for a proposal to appoint professor Jan Novotný to the position of professor emeritus. Professor Rudolf Šrámek was presented with the honorary degree of Doctor honoris causa by the University of Ostrava.

The prestigious *Thulin Award* was presented to associate professor Vladislav Mužík by the *Fédération Internationale D'Éducation Physique Europe* while professor Marie Vítková received the South Moravian Region Award for her work with disabled persons and Daniela Jonášová was recognized as *Teacher of the Year* by the Statutory City of Chomutov. Doctoral candidate Zuzana Lenhartová, founder and coordinator of the *Helping People on the Run* initiative, was presented with the Alice Garrigue Masaryk Award awarded by the US Embassy in the Czech Republic.

In 2016 the faculty **celebrated the 70**th **anniversary of its founding**; celebrations culminated on 9 November with a commemorative meeting of the academic community in the Faculty of Law auditorium. A range of commemorative and festive events were also held throughout the year, including a celebration held at Villa Tugendhat, readings by significant Czech writers, a travelling exhibition featuring the *Komenský* magazine (in recognition of its 140th birthday) and the acquisition of new faculty-themed advertising merchandise.

As part of the 70th anniversary celebrations, four faculty teachers were awarded silver medals of Masaryk University, another nine teachers were awarded bronze medals and five were presented with small bronze medals. On the occasion of the anniversary, 21 awards were also presented to distinguished faculty figures by the dean.

A conference dedicated to **inclusive education** entitled *Educating Together* was held in May while in October the faculty participated in the national *Inclusion Week* for the first time, contributing several lectures, seminars and discussions to the event.

In November 2016 the **Civitas student association**, founded by students of the Department of Civics, began to organize public lectures dedicated to civic education.

At the end of the year, the Department of Social Education and the Association for International Affairs held a round table discussion on the *Impact of Russian Propaganda: Ukraine and the Czech Republic*.



Faculty of Economics and Administration

The Faculty of Economics and Administration received 5,631 applications for studies in 2016. A total of 1,317 new students were enrolled, increasing the faculty's student population to 2,828. The proportion of applicants and enrolled students makes the FEA one of the most selective economics faculties in the Czech Republic.

In 2016 the faculty continued to admit students into existing Master's degree programmes taught in English. Interest in studies at the faculty is high among foreign students, with 41 internationals enrolled in degree programmes in 2016 and many others participating in one or two-semester-long placements. In 2016, nearly 150 exchange students took advantage of opportunities offered by various European and worldwide scholarship programmes. The faculty launched the first semester of the Public Economics and Administration degree programme (a follow-up Master's degree programme implemented in collaboration with the University of Eastern Piedmont in Alessandria). Furthermore, the faculty also signed a contract for cooperation with the Taras Shevchenko National University of Kyiv (designed to help incoming students enrolling in the Finance Master's degree programme).

FEA is successfully expanding its existing network of foreign partner universities through the conclusion of new Erasmus agreements. This allows students and employees to benefit from a wider portfolio of foreign study and work placements.

At the same time, it helps the faculty maintain a relatively high number of outgoing students at all levels of study. Collaboration with the **University of Huddersfield** has been expanded to enable Master's students to obtain an MA degree.

Throughout 2016, the faculty continued to develop its scientific and research activities, most notably in the area of international project support. Two prestigious grants were investigated in cooperation with foreign partners: Social Innovation and Civic Engagement (EU 7FP) and Governance of the Interoperability Framework for Rail and Intermodal Mobility (H2020). The MU Grant Agency supported 18 specific research grant projects and two interfaculty Research Support Programme grant projects. In 2016, the faculty participated in the preparation of Masaryk University's strategic development projects for the 2014–2020 programming period, including in the university-wide infrastructure development project entitled Strategic Education Investment Project (SIMU+).

The faculty once again successfully increased the amount of funding allocated to science and research activities, with 7 scientific primary research grants funded by the Czech Science Foundation and 3 applied research projects financed by the Technology Agency of the CR.

The **creation of three new research institutes** was a key development: the *Research Institute for Sustainable Business*, the *Masaryk University Experimental Economics Laboratory* and the *Research Institute for Innovation* are tasked with cooperating with a wide range of public and private partners in the form of contract research.

In the autumn of 2016, the faculty celebrated the 25th anniversary of its establishment. A special session of the FEA scientific board took place during the celebrations, with the dean awarding several commemorative medals for long-term contributions to the development of the faculty, science and education. The celebrations culminated with a theatrical performance of *A Flea in Her Ear* at the Brno Municipal Theatre.

In cooperation with a range of partners, the faculty once again organized the annual **TopSec project** for outstanding students. Students were invited to participate in lectures and workshops prepared by new partners such as Lidl Czech Republic and existing partners including Dell, Deloitte, EY, GrowJob and KPMG.

An additional project hosted by the Becomes company helped students learn Italian and acquire skills in Italian accounting, participate in a work placement in Italy and start a career in Brno. Together with KPMG, the student-operated **Investors Club** organized a student competition entitled FEA 2.0, designed to develop a comprehensive faculty improvement project. The winning team subsequently participated in training and testing at the KPMG assessment centre.



Student-developed tool for persons suffering from dyslexia wins international competition



customizing web browsers to the individual needs of persons suffering from dyslexia. No such technology has previously been developed.

Winning team (from left): Filip Mrváň, Tereza Pařilová and Bruno

LINZ JULY 14,2016

Oberbank. Nicht wie jede Bank.

12.7 Faculty of Informatics

The total number of students enrolled at the faculty as of 31 October 2016 stood at 2,062 (1,251 students were enrolled in Bachelor's degree programmes, 709 in Master's degree programmes and 102 in doctoral degree programmes). The number of students from Slovakia is increasing and constitutes approximately 51% of the student body. The field of study structure remains stable. Bachelor's degree students were presented with a choice of 13 fields of study (including three interfaculty fields) in three degree programmes. Master's degree students were offered a total of 18 fields of study (including one interfaculty and three English-language fields), likewise in three degree programmes. The faculty offered two doctoral fields of study.

Popular Bachelor's fields of study include **Applied Informatics** (approximately 52 % of all newly enrolled students), Computer Systems and Data Processing (12 %), Computer Graphics and Image Processing (approximately 10%) and Computer Networks and Communications (7%). Among Master's degree programmes, the greatest amount of long-term interest has been traditionally generated by Applied Informatics (34%) and Service Science, Management and Engineering (27%).

Outstanding students are awarded scholarships reflecting their academic performance (approximately 100 students were eligible in 2016) while talented first-year students may receive a motivational scholarship (applicable to approximately 60 students in 2016). Additional student incentives include e.g. creative scholarships, mobility fellowships and scholarships in exceptional cases.

With respect to science and research, faculty employees were involved in the investigation of 3 standard Czech Science Foundation (CSF) grants and 1 junior project. A further 4 new CSF grants are scheduled for launch in 2017.

In addition to work on 3 major R&D projects, the faculty represented MU in the *Omega* project funded by the Technology Agency of the CR (TACR) and two **H2020 projects**. It also recently began investigating 3 interdisciplinary projects announced by the MU Grant Agency and an internal project announced by the TTO (TACR).

In 2016 professor **Antonín Kučera** received the prestigious **Friedrich Wilhelm Bessel Research Award**. The Rector's Award for Outstanding Research Results Achieved by Young Scientists under 35 was presented to Dr. Martin Maška in recognition of his extraordinary research results and the Rector's Award for the Best Students in Doctoral Programmes went to Jakub Gajarský.

A total of 12 students successfully completed their doctoral studies in 2016, of which 2 students received dean's awards for outstanding doctoral theses. In two admission procedures, a total of 37 new students were admitted to doctoral studies, of which 15 in Computer Systems and Technologies and 22 in the Informatics field of study. In the autumn 2016 semester the faculty co-organized the *Text*, *Speech*, *Dialogue TSD* international conference and the traditional international *MEMICS* science workshop for doctoral candidates.

Over 100 final theses prepared in cooperation with industrial partners were successfully defended at the faculty in 2016. Faculty cooperation with industrial partners focused on partners with small numbers of successfully defended theses in order to emphasize potential for successful future cooperation. Thanks to the **Association of Industrial Partners**, the faculty was able to participate in collaboration with 32 companies.

In late 2016, the faculty decided that in order to become strategic partners, companies must support the research activities of individual doctoral students; the current number of participating companies, i.e. 32, thus constitutes maximum capacity, despite the significantly higher levels of interest among companies.

The **CERIT SP industrial park** launch was carried out according to plan, with 20 companies in place, incubator occupancy at 88 % and overall science park occupancy at 96 % by the end of 2016. CERIT SP hosted a successful cyber security exercise entitled *Cyber Czech 2016* as well as a number of additional training courses for state authorities and commercial partners.

The faculty also focused on developing cooperation with secondary schools, specifically with five selected schools in Brno (activities, lectures, Secondary School Scientific Activity, lifelong-learning courses for talented students).

Maintaining relations with the faculty's 4,400 graduates has also become a priority. Activities in this area began with a broad survey of graduate communication preferences and collaboration possibilities carried out in late 2016.



Faculty of Social Studies

In 2016, a sum total of 3,259 students were enrolled in all Bachelor's, Master's and doctoral fields of study implemented at FSS. With respect to Bachelor's studies, the faculty continues to maintain a highly selective approach. The same is true of the Master's programme, where a substantial number of applicants hail from other universities. The faculty offers seven Master's fields of study taught fully in English, three of which are implemented in cooperation with international institutions. Moreover, all doctoral degree programmes at the faculty are likewise accredited in English. 91 Master's students and 14 doctoral students were enrolled in fields of study taught in English, confirming the existence of a high demand for such studies. The Faculty prepared two new Master's fields of study in English - Conflict and Democracy Studies and Public Policy and Human Resources - and one Bachelor's field of study - International Relations and European Studies all of which are scheduled for launch in September 2017.

International mobility remains popular: a total of 263 outgoing students participated in placements abroad, of which 175 were carried out thanks to the Erasmus+ programme. The number of incoming students from abroad stood at 201. The faculty hosted two US lecturers thanks to the *Fulbright-Masaryk Distinguished Chair* programme: Joseph Lewandowski at the Department of Sociology and Pulitzer Prize-winning professor of journalism Stephen Doig at the Department of Media Studies and Journalism. Another two lecturers visited the faculty as part of the Erasmus Mundus programme and an additional 13 thanks to Erasmus+.

While research naturally takes place at individual departments, a great deal of research activity is concentrated at **four specialized units**: the International Institute of Political Science, Institute for Research on Children, Youth and Family, Office for Population Studies and the Institute for Public Policy and Social Work. The units are all financed from institutional support sources, Czech Science Foundation research projects and European and other international projects. A number of experts also successfully participated in international research teams investigating EU programmes. The investigation of **three FP7 and H2020 projects** continued while a **new H2020 project** was launched along with a SoMoPro project designed to acquire experienced foreign employees.

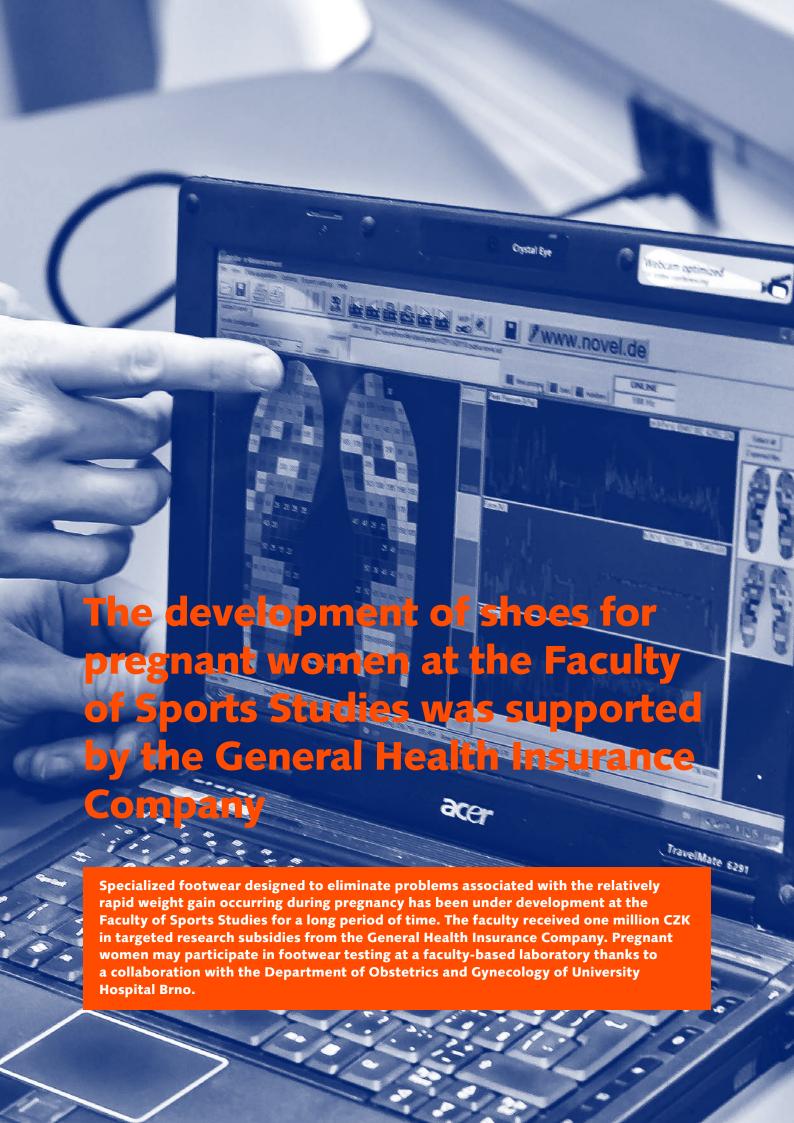
The faculty also investigated **24 Czech Science Foundation projects**, **4 TACR projects**, **1** project funded by the Czech-Norwegian Research Programme, **1** Ministry of Culture project, **3** Ministry of the Environment projects, **12** specific research projects and **4** interdisciplinary projects funded by the MU Research Support Programme.

The **Rector's Award** for Outstanding Research Results Achieved by Young Scientists under 35 was presented to Adéla Souralová and the Rector's Award for the Best Students in Doctoral Programmes went to Lenka Dědková. The Rector's Award for Long-term Excellence in Research was presented to professor Petr Macek.

Several **traditional students placements** took place in 2016 with four students from the Department of Political Science participating in student internships in election campaigns in the United States. Thanks to the Masaryk Scholarship for Talented Political Scientists, ten students of the Department of Political Science were able to participate in internships at ten prestigious institutions. Faculty alumni were instrumental in helping ensure this undertaking. Faculty researchers focused on collaboration with the **applied research** sector; e.g. the Institute for Public Policy and Social Work prepared a study for the development of the *Fifth Community Plan of Social Services in the City of Brno* for the 2018–2019 period.

Traditional collaborations with schools included lectures and workshops held at secondary schools as well as regular events for schools and the general public, e.g. the *8th annual Multimedia Day* event organized by the Department of Media Studies and Journalism.

Key faculty activities and events taking place throughout the year included traditional conferences, summer schools and workshops. The International Institute of Political Science organized three conferences: Digital Revolution and Democracy, held in co-operation with Konrad-Adenauer-Stiftung, Migration – Perspectives and Possible Solutions, an event which brought together academics and government experts, and the prestigious Brno Political Science Symposium, which focused on the reform of Czech constitutional institutions. The sixteenth annual international conference Identities in Conflict – Conflict in Identities was organized by the Department of Sociology. The Department of Environmental Studies helped organize the Ekofilm festival. The EUSOC summer school took place in Telč in the autumn 2016 semester.



Faculty of Sports Studies

A total of 1,272 students in 11 Bachelor's and Master's fields of study were enrolled at the Faculty of Sports Studies in 2016; 322 graduates successfully completed their studies. Fields of study popular among applicants for Bachelor's studies included Physiotherapy, Management in Sports and Physical Education and Sport (Coaching specialisation). Demand for Master's studies was balanced across the field offer. Approximately one third of all entrance applications for Master's studies were submitted by applicants from other higher education institutions. Of the 64 students enrolled in the doctoral degree programme, 12 managed to complete it successfully.

The faculty offered 9 scholarship programs; a new scholarship was created in order to support the submission of final theses in English and scholarships for excellent study results and sports representation were updated. The newly accredited Fitness Coach Master's field of study is scheduled to start in 2017. Accreditation for the Bachelor's level of this field of study is currently being prepared within the Research, Development and Education Operational Programme framework.

In 2016, educational materials available through the Impact portal underwent a significant overhaul, with 207 course materials updated (155 Bachelor's and Master's courses, 41 doctoral courses, 11 internships). New multimedia study materials were prepared for the Human Resources in Sport course.

In 2016 the faculty submitted **65 project proposals to national and international grant schemes**. A pilot project focusing on the development of footwear for pregnant women was launched with the support of the General Health Insurance Company in order to demonstrate the impact of specific biomechanical footwear and insoles on reducing the incidence of spinal cord injuries in women in advanced pregnancy stages. An additional 12 development projects and 19 research projects focused on a range of relevant issues including the Post-Career Life of Former Athletes and Walk Analysis of Parkinson's Disease Patients. A total of 59 doctoral students were actively engaged in the projects.

The faculty implemented several **contracted research** projects such as Analysis of the Impact of Work Environment on Employee Health and Work Performance and Analysis of Selected Physiological and Functional Parameters of Elite Dancers.

The publication activities of the faculty's academic employees continued to increase, with 56 articles scholarly journal articles, 1 scholarly publication, 13 chapters in scholarly publications and 39 proceedings articles published in 2016.

The faculty also helped organize the **seventh annual** *Sports Psychology in Practice international conference*. The event, primarily dedicated to the *theory of transition* – closely linked to sports migration and dual careers – drew over 100 participants.

The faculty continued to **develop cooperation with foreign institutions**; three new interinstitutional agreements were negotiated. 42 students, 10 academics and 2 non-academic employees took advantage of the faculty's mobility programmes. The number of incoming international students and employees increased to 53 and 22 respectively.

The third annual *Brno Juggling Convention* held in February was attended by over 200 participants from more than 10 countries. In March, the faculty hosted the *International Network in Sport and Health Science* congress. A group of teachers and students took part in the *Mini Recrea Olympic* international project in September, an undertaking which forms part of the *European Week of Sports*. The faculty also held the fifth annual international summer school of martial arts focusing on Panantukan Filipino boxing and Brazilian jiu-jitsu.

In cooperation with regional partners the faculty organized a number of **sporting, charity and educational events for the general public**: Special Olympics, Dean's Run, Lužánky Run, Ivanovice Sports Day, Basket Brno, Badminton FSpS Brno, MARS, Animals Also Do Not Smoke, Children's Day with Mole and Hippo, Psychomotorics Day, PhysioSaturday.

The Lifelong Learning Centre presented a wide range of offers for both the professional and the general public, in part using the new **Universal Education Centre** portal. The best-rated courses included training for coaches 2nd class and seminars focusing on nutritional trends. The offer was expanded to include seminars and lectures for active and recreational athletes dedicated to qualification courses for work with handicapped persons and seniors as well as seminars on nutrition and eating habits.

The faculty also established contractual cooperation with sports associations including the Czech Table Tennis Association, Czech Federation of Okinawa Karate and Kobudo and the Czech Badminton Federation.



Central European Institute of Technology

The CEITEC MU university institute employed 323 full-time employees in 2016, including 91 foreigners. Major steps were taken throughout the year to **modernize the institute's personnel policy**. Personnel planning was introduced and standards governing the size of research groups, i.e. basic units of scientific workplace organization, were established. Institutional personnel policy also focuses on fighting inbreeding as well as an active pursuit of increased internationalization. English has been established as the primary language of communication and research group heads are now being selected using an open **international selection procedure** scheme.

The institute's **scientific performance** is steadily increasing, both in terms of the total number of publications and with respect to output quality. CEITEC MU researchers published **over 200 articles** in prestigious peer-reviewed scientific journals in **2016**, of which over **62 % were published in journals** belonging to the **top 25 % of IF-rated** journals. Thanks to the continuously increasing quality and quantity of research output produced by the institute, the quality of work performed at CEITEC MU is comparable to research carried out at the best institutes of the Academy of Sciences of the Czech Republic and at similar workplaces abroad.

Major research achievements in 2016 include the first ever description of the **structure and activity of viruses attacking bees**. Pavel Plevka's research team was able to break down the structure of these viruses down to the level of individual atoms and to describe changes occurring during the process of cell infection. The acquired knowledge may help find ways of reducing viral infections in bees.

Scientists have also made significant **advances in the study of plant hormones** (cytokinins) which regulate plant growth and produce biomass. Jan Hejátko's research group succeeded in defining a mechanism used by cytokinins to regulate growth and the associated production of lignin – a natural polymer which acts as a cell wall strengthening material in plants. The method has been patented and is awaiting commercial exploitation.

A fundamental shift in the area of plant biology research was achieved by a research group led by Karel Říha, who demonstrated that the **plant longevity is apparently the outcome of their resistance to mutations**. Research showed that prolonging plant life does not significantly increase the mutational burden transmitted to offspring, as opposed to humans where mutations in the cell germline increase with the age of the father.

In the area of human brain and mind research, a research team led by Ivan Rector has been working on **revealing the effects of severe traumas on subsequent generations** by analysing the effects of Holocaust trauma on the psyche of survivors. The research group examined whether changes in brain structure are to be found in an affected person, i.e. whether they were thus more susceptible to higher stress levels or, on the contrary, more resistant to it.

CEITEC MU researchers also contributed to the **detection of the cause of lethal lung infection syndrome in children**. Their research revealed a genetically-driven syndrome which causes death at a very early age.

Three major European projects from the TWINNING Challenge launched at the beginning of the year were designed to help the institute adopt best practices and knowledge from prestigious international institutions. Key partners include top European workplaces such as EMBO and Uppsala University.

Funding for six major projects, implemented in particular as part of the Horizon 2020 scheme, was obtained from international sources. With respect to international cooperation, a great deal of attention was paid to the preparation of a project application for the prestigious *Teaming* challenge. In collaboration with the Vlaams Instituut voor Biotechnologie in Ghent, CEITEC MU successfully submitted a project entitled *PASSAGE – Centre for Plant Synthetic Biology for Bio-Engineering and Sustainable Agriculture*.

In September, the institute launched **Cellular Imaging (CELLIM)**, a core facility designed to provide services which had previously been missing. Since CELLIM is part of the Czech-Bioimaging national research infrastructure, the laboratory is also part of the European Research Infrastructure for Imaging Technologies in Biological and Biomedical Sciences (Euro-BioImaging).

In 2016 the **CEITEC Ph.D. School** admitted **13 international applicants for the Life Sciences programme**. The students were selected in an international two-round selection procedure which primarily emphasized the quality of individual candidates and their scientific potential. Along with the development of the CEITEC brand, the quality of these candidates increases each year.



Institute of Computer Science

Research activities carried out by the Institute of Computer Science primarily focus on **applied cybersecurity** and infrastructure and related applications and services. The ICS simultaneously plays the role of a centralized unit tasked with university-wide responsibility for operating its comprehensive e-infrastructure (computer, technology and telephone networks and their components, servers, computing and cloud storage capacities) and university information systems (economic, personnel and geographic). Research and service activities are thus inextricably interlinked and mutually complementary, which enables the ICS to provide top-level services in selected areas while at the same time focusing on highly relevant research.

Mutual complementarity is also present in both key research areas tackled by the institute. The **Czech Cyber-Crime Centre of Excellence** (C4E) is dedicated to excellent research, development and teaching on cybercrime, cyber-security and critical infrastructure protection. It makes use of the opportunities provided by MU and integrates competencies in the area of informatics with legal and sociological aspects. At the national level it cooperates with a number of partners, including especially the National Security Authority, Ministry of the Interior of the Czech Republic and Czech Police; a collaboration with the Ministry of Defence is currently being prepared.

KYPO Cyber Exercise & Research Platform now provides a unique environment for the research and development of methods protecting against attacks on critical infrastructure. In recognition of achievements like this, the C4E team was presented with the 2016 Minister of the Interior Award for outstanding results in security research. C4E research is supported by a number of projects funded both by the Ministry of the Interior and TACR; three such projects were launched in 2016 (2 MI projects, 1 TACR project). The team also submitted an extensive RDEOP project as part of a call for projects in support of excellent research.

The **CERIT-SC research infrastructure** is part of the roadmap of major European research, development and innovation infrastructures. It is dedicated to building and developing national e-infrastructures while also participating in international communities and close research collaborations with science teams of various disciplines in order to ensure the flexible and efficient use of computing and storage capacities. The centre is involved in a number of international projects (Thalamoss and SDI4Apps and, since 2015, also H2020 WestLife and ELIXIR EXCELERATE); as principal investigator, it has also prepared two RDEOP proposals: CERIT-SC and ELIXIR CZ: Capacity Building.

Collaborations between C4E and CERIT-SC focus mainly on the innovative usage of cloud infrastructure and the techniques and tools necessary for processing large volumes of data. The ICS was involved in the investigation of a total of 21 projects including 6 internationally co-funded research projects.

The ICS is subdivided into five divisions: computing and storage infrastructure, communication infrastructure, information systems, customer care and human resources and economics. The institute employs approximately 130 employees, of which 25 have a title of either Ph.D. or CSc., five employees hold an academic title of associate professor or professor. Over 30 employees participate in teaching, usually at the Faculty of Informatics; cooperation with the faculty includes the **preparation of new courses and fields of study**, especially in the field of **cybersecurity.**

Following an overhaul of the main university website (new graphic design and content), the ICS started the process of adapting individual faculty websites and their content to the same graphic design standard and to the uniform Umbraco technology. Further steps include the preparation of a comprehensive university-wide system with a common sign-in mechanism. In order to improve internal communication and simplify document sharing, the ICS selected the Office 365 platform and the Yammer system, both of which are accessible using the standard university sign-in system. The ICS also operates the University Computer Centre and provides operational support for over 2,500 computers located in central and faculty computer rooms as well as employee computers at several faculties.

2016 saw the expansion of the ICS's role as guarantor for large-scale IT and AV technology acquisition tenders. All relevant RDEOP project proposals were consulted with ICS employees who subsequently evaluated their impact on university e-infrastructure in order to facilitate the explicit allocation of necessary resources required by expert teams submitting such projects.

The institute also plays a role as a supplier of know-how and systems for external entities. External services provided by the institute include the **MEYS Student Register** and additional centralized databases as well as medical data storage databases for hospitals in the South Moravian region, developed and operated in collaboration with the Institute of Health Information and Statistics of the Czech Republic within the framework of the long-term **MeDiMeD** project.

MU Organizational Structure

Masaryk University



Rector's Office

Žerotínovo nám. 617/9, 601 77 Brno, Czech Republic, www.muni.cz

Žerotínovo nám. 617/9, 601 77 Brno

Faculties

Faculty of Law

Law

Faculty of Arts

Faculty of Informatics

FI

Veveří 158/70, 611 80 Brno

Arna Nováka 1/1, 602 00 Brno

Botanická 554/68a, 602 00 Brno

Faculty of Medicine

FMed

Faculty of Education

FEdu

Faculty of Social Studies

=55

Kamenice 753/5, 625 00 Brno

Poříčí 623/7, 603 00 Brno

Joštova 218/10, 602 00 Brno

Faculty of Science

FSci

Faculty of Economics and Administration

Faculty of Sports Studies

FSpS

Kotlářská 267/2, 611 37 Brno

Lipová 507/41a, 602 00 Brno

Kamenice 753/5, 625 00 Brno

Institutes

Institute of Computer Science

ICS

Central European Institute of Technology

CEITEC

Botanická 554/68a, 602 00 Brno

Kamenice 753/5, 625 00 Brno

Other Units

Technology Transfer Office **Language Centre** LC TTO Komenského nám. 220/2, Komenského nám. 220/2, 662 43 Brno 662 43 Brno

University Centre Telč Náměstí Zachariáše z Hradce 2, 588 56 Telč **Central Management Institute of Biostatistics** Structure of the **CEITEC Project University Archives** and Analyses **IBA** Žerotínovo nám. 449/3, 602 00 Brno Kamenice 126/3, 625 00 Brno Koliště 1965/13a, 602 00 Brno **Centre for International Mendel Museum** Cooperation CIC Komenského nám. 220/2, Mendlovo náměstí 907/1a, 603 00 Brno 662 43 Brno

Support Centre for	Centre for Education,
Students with Special	Research and
Needs (Teiresias Centre)	Innovation in ICT CER

Specialized Units

Komenského nám. 220/2,

662 43 Brno

Accommodation and Catering Services ACS	Masaryk University Press	Management of the University Campus at Bohunice	
Vinařská 471/5a, 603 00 Brno	Rybkova 987/19, 602 00 Brno	Kamenice 753/5, 625 00 Brno	

Botanická 554/68a, 602 00 Brno

List of Abbreviations

UNIVERSITY		P-pool	undergraduate programme for
ACS	Accommodation and Catering Services	•	motivated medical students
BIM	Building Information Model	RECETOX	Research Centre for Toxic
BMS	Building Management System		Compounds in the Environment
C4E	Czech CyberCrime Centre of Excellence	ROPOT	Revision Opinion Poll and Testing
CEITEC	Central European Institute of Technology	SIMU +	Masaryk University Strategic
CELLIM	Cell Imaging Core Facility		Education Investment Project
CEPLANT	Regional R&D Centre for Low-Cost Plasma	SUPO	University payment system
CDI DIIIVI	and Nanotechnology Surface Modifications	TTO	Technology Transfer Office
CERIT SP	Centre for Education, Research and	U3A	University of the Third Age
CERT 51	Innovation in ICT – Science and	UCB	University Campus Bohunice
	Technology Park and Incubator	CCD	omversity campus Bonamee
CERIT-SC	Centre for Education, Research and		
021111 00	Innovation in ICT – Scientific Cloud	INSTITUTI	ONS, ORGANIZATIONS
CIC	Centre for International Cooperation	AND PROG	
CSIRT-MU	MU Computer Security	AISEC	International Association of Students
	Incident Response Team	111020	in Economic and Commercial Sciences
DPS	Dynamic Purchasing System	ASCR	Academy of Sciences of the Czech Republic
FA	Faculty of Arts	BUT	Brno University of Technology
FEA	Faculty of Economics and Administration	CASAJC	Czech and Slovak Association
FEdu	Faculty of Education		of Language Centres
FI	Faculty of Informatics	CEEPUS	Central European Exchange
FLaw	Faculty of Law		Programme for University Studies
FMed	Faculty of Medicine	CERMAT	Centre for Educational Evaluation
FSci	Faculty of Science	CESNET	Czech Education and Scientific NETwork
FSpS	Faculty of Sports Studies	CHEI	Council of Higher Education Institutions
FSS	Faculty of Social Studies	CoUnSiL	Collaborative Universe for Sign Language
GAMU	Grant Agency of Masaryk University	CRC	Czech Rectors Conference
IBA	Institute of Biostatistics and Analyses	CSF	Czech Science Foundation
ICS	Institute of Computer Science	CU	Charles University in Prague
INBIT	Incubator for Biotechnology	CZEchELib	National Licensing Centre for
INET	Economic and Administrative		Electronic Information Resources
	Information System of MU	EC	European Commission
IS MU	Masaryk University Information System	ELSA	European Law Students Association
ISAB MU	Masaryk University International	EMBO	European Molecular Biology Organization
	Scientific Advisory Board	ERC	European Research Council
ISEP	International Student	ESG	Standards and Guidelines for
	Exchange Programme		Quality Assurance in the European
LC	Language Centre		Higher Education Area
LPT	Learning Potential Test	EUA	European University Association
MeDiMed	Metropolitan Digital Imaging	EUCA-InVE	stInvesting in Entrepreneurial Universities
	System in Medicine		in Caucasus and Central Asia
MU	Masaryk University	EULETA	European Legal English
MUAS	Masaryk University Academic Senate		Teachers' Association
MUDF	Masaryk University Development Fund	EUSOC	European Graduate School
MUOC	Masaryk University Online Course		for the Social Sciences
MUSC	MU Shopping Centre	H2020	Horizon 2020, EU framework programme
OfD	Office for Development (Rector's Office)		for research and innovation
OPTIMED	comprehensive curriculum	IAESTE	International Association for the Exchange
	innovation in General Medicine		of Students for Technical Experience

IALS	International Association of Law Schools	LV	low voltage
IATEFL	International Association of Teachers	O365	Microsoft Office 365 environment
	of English as a Foreign Language	OJS	Open Journal Systems
IFMSA	International Federation of	OP	operational programme
	Medical Students Associations	PBL/TBL	Problem-based learning/
ISEP	International Student Exchange Programs		Team-based learning
ISMN	International Standard Music Number	PDF	Portable Document Format
MC	Ministry of Culture	PoC	Proof of Concept
ME	Ministry of the Environment	PR	Public Relations
MEYS	Ministry of Education, Youth and Sports	QR	Quick Response
MI	Ministry of Interior	R&D	Research & Development
MLSA	Ministry of Labour and Social Affairs	RIV	Information Register of R&D Results
MRD	Ministry of Regional Development	SMR	South Moravian Region
MS2014+	European Structural and Investment	SS	secondary school
	Funds monitoring system for 2014–2020	SSSA	Secondary School Scientific Activity
OPEIC	Operational Program Enterprise and	TB	terabyte
	Innovation for Competitiveness	USA	United States of America
PU	Palacký University in Olomouc	VAT	Value Added Tax
RDEOP	Research, Development and Education		
	Operational Programme		
SoMoPro	South Moravian Programme for		
	Distinguished Researchers		
TACR	Technology Agency of the Czech Republic		
UNESCO	United Nations Educational, Scientific		
	and Cultural Organization		
USMLE	United States Medical		
	Licensing Examination		

GENERAL		
ACJ	agreement to complete a job	
APW	agreement to perform work	
AV	audiovisual	
BACnet	Building Automation and Control	
	Networks data communication protocol	
CR	Czech Republic	
CT	Czech Television	
DOI	digital object identifier	
EIR	R electronic information resources	
EIS	economic information system	
ERIH PLUS European Reference Index for		
	the Humanities	
ESCI	Emerging Sources Citation Index	
Gbps	gigabit per second	
ICT/IT	information and communication	

technology impact factor

Web of Science

University of West Bohemia in Pilsen Vlaams Instituut voor Biotechnologie

UWB

VIB WoS

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