

# Study Guide

## 2026/2027

### University of Pécs Faculty of Sciences

This Study Guide has been created to help incoming Erasmus+, Exchange, and Study Abroad students navigate their academic journey at our Faculty. It provides essential information about available courses, subject selection, registration requirements, and important academic considerations.

We are committed to making your international experience both academically rewarding and personally memorable, and we look forward to welcoming you to our community.

**Faculty Coordinator:** Alexandra Mátyás  
email: [erasmus@gamma.ttk.pte.hu](mailto:erasmus@gamma.ttk.pte.hu)

[Nomination Informations](#)

[Academic Calendar](#)

At the Faculty of Sciences, incoming exchange students are free to choose from all courses that are available in the Study Guide, regardless of the study level (BSc. or MSc.) or the year.

Before registering, please review the course descriptions carefully and discuss your study plan with your academic coordinator to ensure that the selected courses can be recognized by your home institution.

Please note that prior consultation may be required for some Master's level programmes, as the availability of certain courses is dependent on student enrolment numbers and may vary from semester to semester.

Students interested in PhD, research activities, or individual research projects are advised to contact the Faculty Erasmus Coordinator directly for guidance.

When selecting courses from different programmes, study levels, or years, timetable conflicts may occur, so please plan your schedule carefully.

**Programs, Course Lists, Syllabuses, and for more Information:**

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## Biology

Biology is the most versatile institute of our Faculty. Our research work focuses - concentrates - reacts - adapts to the major problems of the world (e.g., climate change, biohazards, environmental challenges).

The Biology Institute consists of six departments dealing with many important areas of biology, such as genetics, hydrobiology, neurobiology, plant anatomy, plant and animal systematics, plant physiology, ecology and biogeography, molecular biology, microbiology, comparative animal anatomy and developmental biology, cell biology, and virology.

**Program Coordinator & Contact person:** Dr. Edit Pollák [pollak.edit@ttk.pte.hu](mailto:pollak.edit@ttk.pte.hu)

Curriculum Table – Biology Bsc

[Course description](#) (at the bottom of the website Syllabus for Erasmus+)

Course title	Semester	Credits (ECTS)	Course Code
Cell Biology - lecture	Fall	2	ENBIOB1301
Comparative Anatomy I. - laboratory	Fall	4	ENBIOB1104
Basic Laboratory skills lab.	Fall	3	ENBIOBA3001
Fundamental Chemistry I. - lecture	Fall	2	ENBIOB0201

Comparative Anatomy I. - lecture	Fall	2	ENBIOB1103
Plant Anatomy and Morphology - lecture	Fall	3	ENBIOB2101
Plant Anatomy and Morphology	Fall	4	ENBIOB2102
Cell Biology	Fall	3	ENBIOB1302
Mathematics - lecture	Fall	2	ENBIOB0101
Fundamentals of Physics - lecture	Fall	2	BIOB0301
Mathematics - practice	Fall	3	ENBIOB0102
Zootaxonomy - practice	Fall	4	ENBIOB1202
Zootaxonomy - lecture	Fall	3	ENBIOB1201
General Ecology lecture	Fall	2	ENBIOB0801
Biochemistry laboratory	Fall	4	ENBIOB3102
Statistics - practice	Fall	3	ENBIOB0601
Comparative Physiology I. - lecture	Fall	2	ENBIOB1401
Instrumental Analysis - lecture	Fall	2	ENBIOB0901
Instrumental Analysis	Fall	4	ENBIOB0902
Basic Developmental Biology	Fall	2	ENBIOB0701
Instrumental Analysis - seminar	Fall	2	ENBIONV0101
Fundamental Chemistry II. - laboratory	Fall	4	ENBIOB0204
Basic Genetics - lecture	Fall	3	ENBIOB3201
Molecular Biology - lecture	Fall	3	ENBIOB3401
Molecular Biology - lab.	Fall	4	ENBIOB3402
Human Biology - lecture	Fall	2	ENBIOB1601
Plant Physiology - laboratory	Fall	4	ENBIOB2402
Biogeography and zoogeography lect.	Fall	2	ENBIOBA1701

*For Biology Msc. course list and in general about Biology Msc. please contact us at [erasmus@gamma.ttk.pte.hu](mailto:erasmus@gamma.ttk.pte.hu)*

Chemistry

Physics

Geography and Earth Sciences

Institute of Geography and Earth Sciences

The Institute of Geography and Earth Sciences inherits one of the longest histories at the Faculty of Sciences. It became one of the biggest institutions, not only at the University of Pécs, but also in Hungary. Our profile increased decade to decade. Our people organise five departments with special scientific focus, from geology through geoinformatics to urban studies and political geography.

Currently we offer Geography and Earth Sciences programmes both at Bachelor (BSc) and Master (MSc) level, and Geoinformatics at MSc level, all in English. For PhD students, we also offer classes and consultations at the Doctoral School of Earth Sciences. Our policy is to open all courses for internationals, either on Erasmus+ exchange, or any other mobility programs. In order to this, we welcome every student who has interest in any of our classes.

For more information contact our international coordinator, Éva Máté PhD at [mate.eva@pte.hu](mailto:mate.eva@pte.hu)

## Geography BSc

Our Geography BSc includes six semesters, where students can learn more about the relations between geography and related disciplines, analyse and interpret problems and challenges in space, what research and evaluation methods are used in geography, and how to conduct a complex spatial analysis. The programme includes lab work, GIS activities, field works and intensive seminars. Applied geography specialization is offered for all international students, which combines environmental geography, regional development, GIS and tourism. We welcome all students who are interested in spatial problems, geographical relations and patterns, either in physical or in human sphere, and how to evaluate them.

**Program Coordinator & Contact person:** Éva Máté PhD at [mate.eva@pte.hu](mailto:mate.eva@pte.hu)

Curriculum Table – Georgraphy Bsc

[Course description](#) (at the bottom of the website Syllabus for Erasmus+)

Course title	Semester	Credits (ECTS)
An insight into Hungary	-	4
Introduction to Geography	fall	4
Introduction to Office-related applications	fall	3
Road to Geography	fall	1
Social Studies for Geographers	fall	6
Introduction to Astronomy	fall	2
Introduction to Geology	fall	3
Introduction to Geology	fall	2
Introduction to GIS I.	fall	4
Introduction to Human Geography	fall	2
Geomathematics and Geostatistics	fall	4
Introduction to Scientific Work	fall	3
Introduction to Pedology	fall	4
Biogeography	fall	3
Urban Geography	fall	6
Economic Geography	fall	6
Physical Geography of Europe	fall	6
Human Geography of Europe	fall	6

Introduction to ArcGIS	fall	4
Data Acquisition Methods	fall	4
Global Tourism	fall	3
Introduction to Physics	spring	2
Meteorology and Climatology	spring	4
Astronomical Geography and Cartography	spring	3
Introduction to GIS II.	spring	4
Geomorphology	spring	4
Historical Geology and Paleontology	spring	3
Population, Place and Identity	spring	6
Hydrogeography	spring	4
Physical Geography of the Carpathian Basin	spring	6
Human Geography of Hungary	spring	6
Field Trip	spring	3
Project Planning and Project Management	spring	3
Urban Development	spring	4
Analog Cartography	spring	3
GIS Software I.	spring	4
Regional Policies	spring	3
Introduction to Remote Sensing	spring	3
Landscape Analysis and Planning	spring	5
Spatial and Social Conflicts	spring	3
Digital Cartography	spring	3
Transport Geography and Planning	spring	3

## Earth Sciences BSc

The IGES offers you a general and fundamental scientific knowledge to understand the mutually interrelated processes of Earth Sciences. You may familiarize yourself with a wide array of disciplines including the principles of geology, meteorology, astronomy, climatology and hydrology. And, you will learn the methods used in Earth Sciences, and you will find connections with laboratory microscopes, geology hammers in the field and computer models in the office. You may specialize yourself in the field of geology to explore the deeper correlations of subsurface dynamics and how recent landforms have evolved over geologic timescales. This is all done and conveyed to you by a young and dynamic team of faculty in a custom designed and student-specific training algorithm.

**Program Coordinator & Contact person:** Éva Máté PhD at [mate.eva@pte.hu](mailto:mate.eva@pte.hu)

Curriculum Table – Earth Sciences BSc.

[Course description](#) (at the bottom of the website Syllabus for Erasmus+)

Course title	Semester	Credits (ECTS)
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Introduction to Office-related applications	fall	3
Geomathematics and geostatistics	fall	4
Introduction to Geology	fall	3
Introduction to Geology	fall	2
Chemistry basics I	fall	2
Physics basics	fall	2
Biology basics	fall	2
Meteorology	fall	3
Introduction to Astronomy	fall	2
Introduction to GIS I.	fall	4
Introduction to pedology	fall	4
Introduction to hydrology and hydrogeology	fall	3
Introduction to hydrology and hydrogeology	fall	3
Field work	fall	4
Mineralogy	fall	3
Mineralogy	fall	3
Introduction to Geophysics	fall	3
Paleontology	fall	3
Paleontology	fall	3
Geology of energy resources	fall	4
Geochemistry	fall	3
Sedimentary petrology	fall	4
Design and evaluation of exploration drilling	fall	3
Introduction to ArcGIS	fall	4
Data acquisition methods	fall	4
Mathematical methods in earth sciences	spring	
Chemistry basics II.	spring	4
Chemistry basics	spring	2
Climatology	spring	2
Geomorphology	spring	3
Physical geology	spring	4
Historical geology and paleontology	spring	3
Remote sensing	spring	3
Introduction to GIS II.	spring	3
Field measurements, documentation and geological mapping	spring	6
Analytical techniques in geology	spring	3
Earth sciences field camp	spring	3
Petrographic microscopy	spring	4
Igneous and metamorphic petrology	spring	3
Structural geology	spring	6
Earth history	spring	3
Stratigraphy	spring	3
Geology of Hungary	spring	6
Physical geography of Hungary	spring	3
Economic geology	spring	3
Engineering geology	spring	3
Environmental geology	spring	3

## Geography MSc

At Master level, our Geography programme focuses more on specific topics of geographical research and evaluation. Students can dig themselves more into physical and human geography with a methodological focus on the programme. Geography MSc includes a large scope of GIS based evaluations, advanced theoretical knowledge and field evaluation. Our programme provides a solid foundation both for future employment and PhD studies. We welcome applicants who are motivated to take a deeper insight into geography at a higher, professional level.

**Program Coordinator & Contact person:** Éva Máté PhD at [mate.eva@pte.hu](mailto:mate.eva@pte.hu)

Curriculum Table – Geography MSc.

[Course description](#) (at the bottom of the website Syllabus for Erasmus+)

Course title	Semester	Credits (ECTS)
Advanced hardware and software	fall	4
Research Methodology	fall	3
Geomatematics	fall	3
History and Schools of the Geographical Science	fall	2
Development of cultural landscapes, landscape ecology and evaluation	fall	4
Geographical Approach of the Regional Development	fall	4
Regional Geography of the Continents I.	fall	6
Political Geography	fall	4
Modelling and simulations in Earth Sciences	spring	3
Space–Society–Sustainability	spring	2
Regional Geography of the Continents II.	spring	6
<b>Geoinformatics specialization</b>		
Spatial databases	fall	6
Data sources, digitalisation, data integration	fall	3
3D visualization	fall	5
Advanced GIS Software	spring	3
Application of CAD systems in Earth sciences practice I.	spring	5
Earth observation systems I.	spring	4
WebGIS	spring	6
Introduction to AI	spring	3
Fieldwork	spring	3
<b>Geomorphology specialization</b>		
Soil science	fall	3
GIS Database Modeling	fall	2
Applied Geomorphological Mapping	fall	4
Quaternary Research	fall	3
Engineering and Anthropogenic Geomorphology	spring	3
Geologic process modelling	spring	5
Fieldwork in Geomorphology	spring	4
Geomorphic Systems	spring	4

Earth observation systems I.	spring	4
Stratigraphy	spring	3
Research Methods in Geomorphology	spring	3

## Physical Training BSc

The general aim of the program is to train students to become coaches. Trainers who gain well-established theoretical and practical knowledge and skills to be able to plan and implement training sessions for junior players, youth, and adult athletes, too. Coaches become responsible to select athletes, improve and guide their personalities, and enhancing their performance.

**Program Coordinator & Contact person:** Zsuzsanna Gép [gepzsu@gamma.ttk.pte.hu](mailto:gepzsu@gamma.ttk.pte.hu)

Curriculum Table – Physical Training BSc

[Course description](#) (at the bottom of the website Syllabus for Erasmus+)

Course title	Semester	Credits (ECTS)	Course Code
Accident Prevention, First aid, and Sport Hygiene (lecture)	Fall	2	ENAEDZN1101
Anatomy I. (lecture)	Fall	2	ENAEDZN1001
Basic of individual sports (basics of athletics, swimming, martial arts, sports gymnastics) (practice)	Fall	8	ENAEDZN0401
Basics of Theory of Training II. (Lecture)	Fall	2	ENAEDZN0702
Biochemistry (lecture)	Fall	3	ENTES1101
Biomechanics (lecture)	Fall	2	ENAEDZN0801
Calisthenics I. (practice)	Fall	2	ENAEDZN0101
Exercise Physiology (practice)	Fall	2	ENAEDZN1501
Human Biology (lecture)	Fall	2	ENAEDZN0901/ ENBIOB1601
Digitalization and artificial intelligence (AI) in sport (practice)	Fall	2	N/A
Introduction to Psychology I. (lecture)	Fall	2	ENAEDZN2001
Methods of Physical Education and Inclusion (lecture and practice)	Fall	4	ENAEDZNA2301
Pedagogy I. (Introduction to Pedagogy) (lecture)	Fall	2	ENAEDZN1901
Performance Testing (practice)	Fall	2	ENAEDZN1801
Physiology, Sportphysiology I. (lecture)	Fall	2	ENAEDZN1301
Programs of Youth Sports (practice)	Fall	2	ENAEDZN3201/ ENAEDZNA3201

Recreation Theory, Sports in Alternative Environment (practice)	Fall	3	ENMNREKA4301
Social Sciences I. (Philosophy) (lecture)	Fall	2	ENAEDZN2501
Social Sciences III. (Sport Pedagogy and Sociology of Sport) (lecture)	Fall	4	ENAEDZN2503
Sportmanagement (lecture)	Fall	2	ENAEDZN2901
Sportpsychology (lecture)	Fall	2	ENAEDZN2101
Anatomy II. (lecture)	Spring	2	ENAEDZN1002
Basics of Theory of Training I. (lecture)	Spring	2	ENAEDZN0701/ ENAEDZNA0701
Calisthenics II. (practice)	Spring	2	ENAEDZN0102
Dietetics (lecture)	Spring	2	ENAEDZN1401
Doping and sports (lecture)	Spring	3	AEDZN3501
Event Management (practice)	Spring	2	ENAEDZN3001
Introduction of Research Methods in Sport (practice)	Spring	2	ENAEDZN2801
Leadership and Organization of Sport Camps (lecture)	Spring	3	ENAEDZN3101
Motor Development (lecture)	Spring	2	ENAEDZN0501
Motor Learning Motor Control (lecture)	Spring	2	ENAEDZN0601
Pedagogy II. (Public Education) (lecture)	Spring	2	ENAEDZN1902
Pedagogy III (Theories of education, didactics) (lecture+practice)	Spring	4	ENAEDZNA1903
Physical Education Games (practice)	Spring	2	ENAEDZN0201
Physiology, Sportphysiology II. (lecture+practice)	Spring	4	ENAEDZN1302
Prevention, Physical Therapy, Rehabilitation (practice)	Spring	4	ENAEDZN1601
Social Sciences II. (Communication, Introduction to Sociology, Basic of Sport Law) (lecture)	Spring	6	ENAEDZNA2502
Sport Injuries (lecture)	Spring	2	ENAEDZN1701
Sup Yoga (practice)	Spring	2	TTTESV9601
Yoga (Hatha yoga) (practice)	Spring	4	ENTESV06
Communication in sport (practice)	Spring	2	ENAEDZN2601
Communication and practice in the classroom (practice)	Spring	3	ENTESV24

## Computer Science BSc.

The course lists are still under review. If you would like to receive them, please contact [erasmus@gamma.ttk.pte.hu](mailto:erasmus@gamma.ttk.pte.hu)