

# Course Offer

for Incoming Exchange Students

School of Medical Engineering and Applied Social Sciences

fh-ooe.at/en/linz-campus

# **General Information**

#### **Choosing Courses**

We recommend exchange students to choose courses only from **one** semester (# 1 or # 3) Of course, exchange students who speak German fluently may also participate in courses taught in German at Linz Campus – please contact the <u>International Office</u> for more information if you are interested in studying in German.

A full workload for regular students is 30 ECTS per semester. Due to timetable overlaps this is mostly not possible for exchange students. Incoming students are therefore expected to attend courses worth 20 ECTS.

#### Academic Calendar

**Winter semester:** October 1st to mid- February (Semesters 1, 3, 5) **Summer semester:** March 1st to mid- July (Semesters 2, 4, 6)

**Examination Period:** End of January to mid- February (winter semester) End of June to mid- July (summer semester)

**Breaks:** Christmas (2 weeks); February (1 to 4 weeks); Easter (1 week); summer holidays in July/August/September (12 weeks).

#### Types of Classes

#### Lectures (VO, ILV)

While some subjects are presented as "traditional" lectures or lectures with practical elements, others are taught in the form of seminars, laboratory and practical classes. In many cases, both lecture and practical class are combined in the same semester.

#### Seminars, Laboratory and Practical Classes (SE, LB, UE)

These are classes in which students work on special topics, then present and discuss them within a relatively small group. In laboratory and practical classes students learn to apply their knowledge acquired in lectures and seminars.

#### **Block Courses**

In some cases – primarily in the case of seminars and laboratory classes – instruction does not take place weekly, but is instead delivered in blocks of more intensive instruction (e.g., one block every two weeks or even one block per term).

#### Excursions

Some courses occasionally include excursions, and attendance is generally obligatory. Any costs that arise for entrance fees, accommodation or other expenses are paid by the students.

#### **Project Work (PT)**

These are not theoretical projects but "real" work – with all the responsibilities that go along with it and have therefore proven popular with our exchange students in recent semesters. Students work on problems relevant to the particular company. They work in teams of 4-10 students and are supervised and guided by a faculty member. Most of the time the teams work on their own and at the end of the semester present their results to both their supervising faculty member and the company.

The main aim of these projects is to train the students in teamwork. Teamwork and team spirit are key elements of Linz Campus philosophy – students learn to work together rather than competing with one another.

#### Attendance Policy:

Please note, that there is a compulsory attendance in all types of classes except the lectures marked with "VO". You'll find this information within the "Course unit code". Compulsory attendance means that you have to be present in 100 % of the classes. Absence is only permitted in case of illness or other justifiable reason about which you have to inform the lecturer asap. In any case, at least 80 % of the classes have to be attended. Otherwise you will not be able to finish the course.

# Master's Degree Programme

Programme (department)	Course unit code	Course unit title	Course type	Semester (level)	Level	ECTS	Page
Medical Engineering (Master, Linz Campus)							
MME.ma	AMI1IL	Advanced Medical Imaging and Diagnosis Systems I	Integrated course	1	Master	5	3
MME.ma	AMT1IV	Advanced Materials	Integrated course	1	Master	5	4
MME.ma	<b>BIM1IL</b>	Bionic Implants I	Integrated course	1	Master	2,5	5
MME.ma	CLB1IL	Cellular Biophysics	Integrated course	1	Master	1	6
MME.ma	ECD1IL	Electronic Circuit Design	Integrated course	1	Master	2,5	7
MME.ma	EMB1IL	Embedded Systems I	Integrated course	1	Master	2,5	8
MME.ma	GER1IL	German Language I A1.1.	Integrated course	1	Master	3	9
MME.ma	IPM3VO	International Product Management	Lecture	3	Master	2	10
MME.ma	IPT1IL	Introduction to Programming-Tools	Integrated course	1	Master	2,5	11
MME.ma	MAT1IL	Applied Mathematics I	Integrated course	1	Master	4	12
MME.ma	MED1VO	Selected Topics in Medicine for Medical Engineers I	Lecture	1	Master	1	13
MME.ma	MOC1IL	3D Motion Capture and Analysis	Integrated course	1	Master	3	14
MME.ma	MSI1IL	Musculoskeletal Systems Modeling and Simulation	Integrated course	1	Master	2,5	15
MME.ma	PRJ3PT	Project: Scientific or Professional	Project	3	Master	<del>19</del>	<del>-16</del>
MME.ma	PYT1IL	Python	Integrated course	1	Master	1	17
MME.ma	<b>REG3IL</b>	Regulatory Affairs	Integrated course	3	Master	2,5	18
MME.ma	RUE3IL	Requirements and Usability Engineering	Integrated course	3	Master	2,5	19
MME.ma	SLC1IL	Applied Software Life Cycle Processes	Integrated course	1	Master	2,5	20

# Master's Degree Programme

Programme (department)	Course unit code	Course unit title	Course type	Semester (level)	Level	ECTS	Page
Medical Engir	neering (Master	; Linz Campus)					
MME.ma	SYS3VO	Applied Systems Engineering	Lecture	3	Master	4	21
MME.ma	TIM1VO	Technological Innovation in Medicine I	Lecture	1	Master	2,5	22

#### Advanced Medical Imaging and Diagnosis Systems I (AMI1IL)

Degree course	MME.ma
Course title	Advanced Medical Imaging and Diagnosis Systems I
Course code	AMI1IL
Level	Master
Term	WS23/24
Lecturer	Raimund Kleiser, Armin Hochreiner, Dominik Utz
Contact hours per week	4
ECTS credits	5
Course type	Integrated course
Examinations	written examination
Language of instruction	English
Places for international students	3

# Learning objectives:

n.a.

#### Content:

n.a.

#### Prerequisites:

# Advanced Materials (AMT1IL)

Degree course	MME.ma
Course title	Advanced Materials
Course code	AMT1IV
Level	Master
Term	WS23/24
Lecturer	Jaroslaw Jacak, Dmitry Sivun
Contact hours per week	4
ECTS credits	5
Course type	Integrated course
Examinations	oral or written examination
Language of instruction	English
Places for international students	3

# Learning objectives:

n.a.

#### Content:

n.a.

#### Prerequisites:

# Bionic Implants I (BIM1IL)

Degree course	MME.ma
Course title	Bionic Implants I
Course code	BIM1IL
Level	Master
Term	WS23/24
Lecturer	Thomas Haslwanter
Contact hours per week	2
ECTS credits	2,5
Course type	Integrated course
Examinations	continuous assessment
Language of instruction	English
Places for international students	1

# Learning objectives: n.a.

#### Content:

n.a.

#### Prerequisites:

# Cellular Biophysics (CLB1IL)

Degree course	MME.ma
Course title	Cellular Biophysics
Course code	CLB1IL
Level	Master
Term	WS23/24
Lecturer	Birgit Plochberger
Contact hours per week	1
ECTS credits	1
Course type	Integrated course
Examinations	continuous assessment
Language of instruction	English
Places for international students	1

# Learning objectives: n.a.

#### Content:

n.a.

# Prerequisites:

# Electronic Circuit Design (ECD1IL)

Degree course	MME.ma
Course title	Electronic Circuit Design
Course code	ECD1IL
Level	Master
Term	WS23/24
Lecturer	Armin Hochreiner
Contact hours per week	2
ECTS credits	2,5
Course type	Integrated course
Examinations	oral or written examination
Language of instruction	English
Places for international students	2

# Learning objectives: n.a.

#### Content:

n.a.

# Prerequisites:

# Embedded Systems I (EMB1IL)

Degree course	MME.ma
Course title	Embedded Systems I
Course code	EMB1IL
Level	Master
Term	WS23/24
Lecturer	Hubert Egger
Contact hours per week	2
ECTS credits	2,5
Course type	Integrated course
Examinations	oral or written examination
Language of instruction	English
Places for international students	2

# Learning objectives:

n.a.

#### Content:

n.a.

# Prerequisites:

# German Language I A1.1. (GER1IL)

Degree course	MME.ma
Course title	German Language I A1.1.
Course code	GER1IL
Level	Master
Term	WS23/24
Lecturer	Maria Rezner
Contact hours per week	2
ECTS credits	3
Course type	Integrated course
Examinations	continuous assessment
Language of instruction	English
Places for international students	1

# Learning objectives:

n.a.

#### Content:

n.a.

#### Prerequisites:

#### International Product Management (IPM3VO)

Degree course	MME.ma
Course title	International Product Management
Course code	IPM3VO
Level	Master
Term	WS23/24
Lecturer	Wolfgang Lienhart
Contact hours per week	2
ECTS credits	2
Course type	Lecture
Examinations	oral or written examination
Language of instruction	English
Places for international students	1

# Learning objectives:

n.a.

#### Content:

n.a.

#### Prerequisites:

# Introduction to Programming-Tools (IPT1IL)

Degree course	MME.ma
Course title	Introduction to Programming-Tools
Course code	IPT1IL
Level	Master
Term	WS23/24
Lecturer	Andreas Schrempf, Robert Merwa, Thomas Haslwanter
Contact hours per week	2
ECTS credits	2,5
Course type	Integrated course
Examinations	continuous assessment
Language of instruction	English
Places for international students	1

# Learning objectives: n.a.

#### Content:

n.a.

#### Prerequisites:

# Applied Mathematics I (MAT1IL)

Degree course	MME.ma
Course title	Applied Mathematics I
Course code	MAT1IL
Level	Master
Term	WS23/24
Lecturer	Gerhard Höfer
Contact hours per week	3
ECTS credits	4
Course type	Integrated course
Examinations	oral or written examination
Language of instruction	English
Places for international students	1

# Learning objectives: n.a.

#### Content:

n.a.

#### Prerequisites:

#### Selected Topics in Medicine for Medical Engineers I (MED1VO)

Degree course	MME.ma
Course title	Selected Topics in Medicine for Medical Engineers I
Course code	MED1VO
Level	Master
Term	WS23/24
Lecturer	Anja Ruhdorfer
Contact hours per week	1
ECTS credits	1
Course type	Lecture
Examinations	oral examination
Language of instruction	English
Places for international students	1

#### Learning objectives:

n.a.

#### Content:

n.a.

#### Prerequisites:

# 3D Motion Capture and Analysis (MOC1IL)

Degree course	MME.ma
Course title	3D Motion Capture and Analysis
Course code	MOC1IL
Level	Master
Term	WS23/24
Lecturer	Thomas Haslwanter
Contact hours per week	2,4
ECTS credits	3
Course type	Integrated course
Examinations	oral or written examination
Language of instruction	English
Places for international students	2

# Learning objectives:

n.a.

#### Content:

n.a.

#### Prerequisites:

#### Musculoskeletal Systems Modeling and Simulation (MSI1IL)

Degree course	MME.ma
Course title	Musculoskeletal Systems Modeling and Simulation
Course code	MSI1IL
Level	Master
Term	WS23/24
Lecturer	Andreas Schrempf
Contact hours per week	2
ECTS credits	2,5
Course type	Integrated course
Examinations	oral or written examination
Language of instruction	English
Places for international students	1

#### Learning objectives:

n.a.

#### Content:

n.a.

#### Prerequisites:

#### Project: Scientific or Professional (PRJ3PT)

Degree course	MME.ma
Course title	Project: Scientific or Professional
Course code	PRJ3PT
Level	Master
Term	<del>WS23/24</del>
Lecturer	Hubert Egger, Birgit Plochberger, Jaroslaw Jacak, Andreas Schrempf, Thomas Haslwanter, Armin Hochreiner, Robert Merwa
Contact hours per week	<del>0,5</del>
ECTS credits	<del>19</del>
Course type	Project
Examinations	written examination
Language of instruction	English
Places for international students	16

# Learning objectives: n.a.

#### Content:

n.a.

#### Prerequisites:

# Python (PYT1IL)

Degree course	MME.ma
Course title	Python
Course code	PYT1IL
Level	Master
Term	WS23/24
Lecturer	Florian Weber
Contact hours per week	1
ECTS credits	1
Course type	Integrated course
Examinations	continuous assessment
Language of instruction	English
Places for international students	1

# Learning objectives: n.a.

#### Content:

n.a.

# Prerequisites:

# Regulatory Affairs (REG3IL)

Degree course	MME.ma
Course title	Regulatory Affairs
Course code	REG3IL
Level	Master
Term	WS23/24
Lecturer	Wolfgang Ecker, Reinhard Berger, Elisabeth Mertl, Martin Renhardt, Michael Ring
Contact hours per week	2
ECTS credits	2,5
Course type	Integrated course
Examinations	oral or written examination
Language of instruction	English
Places for international students	1

# Learning objectives:

n.a.

#### Content:

n.a.

# Prerequisites:

# Requirements and Usability Engineering (RUE3IL)

Degree course	MME.ma
Course title	Requirements and Usability Engineering
Course code	RUE3IL
Level	Master
Term	WS23/24
Lecturer	Michael Engler, Jay M. Kapellusch
Contact hours per week	2
ECTS credits	2,5
Course type	Integrated course
Examinations	oral or written examination
Language of instruction	English
Places for international students	1

# Learning objectives:

n.a.

#### Content:

n.a.

#### Prerequisites:

# Applied Software Life Cycle Processes (SLC1IL)

Degree course	MME.ma
Course title	Applied Software Life Cycle Processes
Course code	SLC1IL
Level	Master
Term	WS23/24
Lecturer	Andreas Böhler
Contact hours per week	2
ECTS credits	2,5
Course type	Integrated course
Examinations	oral or written examination
Language of instruction	English
Places for international students	1

#### Learning objectives:

n.a.

#### Content:

n.a.

#### Prerequisites:

# Applied Systems Engineering (SYS3VO)

Degree course	MME.ma
Course title	Applied Systems Engineering
Course code	SYS3VO
Level	Master
Term	WS23/24
Lecturer	Hubert Egger
Contact hours per week	3
ECTS credits	4
Course type	Lecture
Examinations	oral or written examination
Language of instruction	English
Places for international students	1

# Learning objectives: n.a.

#### Content:

n.a.

#### Prerequisites:

# Technological Innovation in Medicine I (TIM1VO)

Degree course	MME.ma
Course title	Technological Innovation in Medicine I
Course code	TIM1VO
Level	Master
Term	WS23/24
Lecturer	Kristian O'Connor
Contact hours per week	2
ECTS credits	2,5
Course type	Lecture
Examinations	written examination
Language of instruction	English
Places for international students	1

# Learning objectives: n.a.

#### Content:

n.a.

#### Prerequisites: