

International University of Sarajevo (IUS)												
Faculty of Engineering and Natural Sciences (FENS)												
Mechanical Engineering (ME) - 120 ECTS Master's Program												
Academic Year 2025-2026												
Semester I						Semester II						
Code	Title	Prerequisites	T	P	ECTS	Code	Title	Prerequisites	T	P	ECTS	
ENS500	Research Methodologies for Engineers and				12	MExxx	Program elective III	See Table1			6	
MATH517	Advanced Mathematics for Engineers and		3	1	6	MExxx	Program elective IV	See Table1			6	
MExxx	Program elective I	See Table1			6	MExxx	Program elective V	See Table1			6	
MExxx	Program elective II	See Table1			6	MExxx	Program elective VI	See Table1			6	
						MExxx	Program elective VII	See Table1			6	
Semester Total =					30	Semester Total =					30	
Semester III						Semester IV						
Code	Title	Prerequisites	T	P	ECTS	Code	Title	Prerequisites	T	P	ECTS	
ME551	Scientific Activity I				6	ME552	Scientific Activity II				6	
ME550	Seminar	See Table1			12	ME595	Master Thesis		2	20	24	
ME500	Research Activity	See Table1			12							
Semester Total =					30	Semester Total =					30	
Abbreviations: T (Theory), P (Practice), ECTS credit						No. of Courses						8
Total Credits Required for Graduation						Average ECTS Credits Per Semester						30
Total Credits of Electives						Elective Ratio						35%
7 Program Electives are taken from Table 1. At most 2 undergraduate level courses in ME can be taken as program elective with academic advisor's approval.												
Faculty Elective courses of level 500 and 600 can be replaced with program elective of ME with academic advisor's approval.												
Seminar (12 ECTS) develops students' research and presentation skills through periodic presentations with peer and faculty feedback. It also includes expert talks by guest speakers and faculty on advanced topics and research trends.												
Scientific activity involves conducting research that results as an output, such as:												
1. A journal article published in a peer-reviewed journal (12 ECTS), approved by the mentor.												
2. A paper presented at conference proceedings (6 ECTS), approved by the mentor and the Program Council.												
3. A report documenting at least a one-month research visit at another research institution.												
4. A project successfully implemented in the industry.												
If the chosen scientific activity differs from a journal article or conference paper as outlined above, the mentor and Program Council will evaluate the submitted work and assign appropriate ECTS credits.												
Master Thesis (24 ECTS) is taken after successfully completing the Research Activity and Seminar. It involves conducting original research and producing a written dissertation evaluated by the mentor and an academic												
Research Activity (12 ECTS) guides students initiating their thesis work, focusing on foundational sections such as background research. Students apply knowledge gained from the ENSxxx course, with their progress evaluated by their mentor.												
This new curriculum is being implemented for the new students who entered the class in the year 2025/2026 or after.												

Table 1: Program electives of ME*			
Code	Title	Pre-requisites	ECTS
IE425	Computer Aided Design and Manufacturing		6
IE502	Advanced Quality and Reliability Engineering		6
ME411	Renewable Energy Technology		6
ME414	Energy Conversion Technology		6
ME415	Computational Methods		6
ME416	Turbomachinery		6
ME502	Measuring techniques and Instrumentation		6
ME503	Advanced Fluid Dynamics		6
ME504	Advanced Thermodynamics		6
ME507	Computational Fluid Dynamics		6
ME510	Physical Transport Phenomena		6
ME518	Advanced Materials		6
ME520	Welding and Joining Technologies		6
ME580	Special Topics in Engineering		6
ME605	Research Activity		6
* Or Any new elective course offered later due to new technologies or new facilities in the university with academic advisor's approval			

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Last update: June 11, 2025

Senate Decision: IUS-SENAT-11-1582/25; June 11, 2025