

# Curriculum for the Department of Mechanical Engineering

## Master Graduate Program For 2023

May 23, 2023 Passed by the Departmental Curriculum Committee at its 3<sup>rd</sup> meeting, Spring semester, Academic Year 2022-23  
 May 23, 2023 Passed by the Departmental Affairs Meeting at its 4<sup>th</sup> meeting, Spring semester, Academic Year 2022-23  
 Approved at the 3<sup>rd</sup> College Curriculum Meeting of academic year 111, on May 31, 2023  
 Approved at the 4<sup>th</sup> University Curriculum Meeting of academic year 111, on Jun 14, 2023

Semester (Credit /hour)	Fall		Spring	
	Courses	Credit/hour	Courses	Credit/hour
Required courses (0/2)	Treatise	0/1	Treatise	0/1
Elective courses (3/3)	Failure Analysis of Materials	3/3	Mechanical Behaviors of Materials	3/3
	Vibration	3/3	Finite Element Method	3/3
	Automatic Optical Inspection	3/3	Computer Aided Structure Design and Analysis	3/3
	Precision Machine Design	3/3	Principles & Applications of Gears	3/3
	Introduction to Computational Fluid Dynamics and Practice	3/3	Green Energy Engineering	3/3
	Micro Machine System	3/3	Renewable Energy	3/3
	Hydraulic and Compressible Flow Turbomachines	3/3	Intelligent Machinery and Manufacturing	3/3
	Advanced 3D Printer Technology	3/3	Thermal Fluid Measurement	3/3
	Engineering Statistics and Probability	3/3	Engineering Optimum Design	3/3
	Advanced Composite Structures	3/3	Advanced Mechanics of Materials	3/3
	Composite structural mechanics	3/3	Sensor Principle and Application	3/3
	Internships	3/3	Satellite Navigation for Aviation	3/3
	Application Programming for Engineers	3/3		

### Graduation Qualifications:

- 24 credits. (Include 8 elective courses, and at least two semesters of Thesis Seminar).
- The dissertation oral examination must be passed.
- Academic Ethics Online Course must be Pass
- Please refer to the Study Regulations for the Master's Program of the Department.

\*The number of courses offered each academic year will be adjusted according to the actual approved standards.