

**Institute of Engineering, Pulchowk Campus, Lalitpur**  
**Course Structure 2025**  
**MSc in Mechanical Engineering**

Year : I

Part I

Teaching Schedule				Examination Scheme			Total	Remarks
SN	Course Code	Course Title	Credit	Assessment Marks	Final Exam			
					Duration Hours	Marks		
1	ENMEME 501	Computational Engineering	4	40	3	60	100	
2	ENMEME 502	Thermofluids and Heat Transfer	4	40	3	60	100	
3	ENMEME 503	Systems Engineering	4	40	3	60	100	
4	ENMEME 504	Continuum Mechanics	4	40	3	60	100	
		Total	16	160		240	400	

Year : I

Part II

Teaching Schedule				Examination Scheme			Total	Remarks
S. N.	Course Code	Course Title	Credit	Assessment Marks	Final Exam			
					Duration Hours	Marks		
1	ENMEME 551	Research Methods and Data Analytics	4	40	3	60	100	
2	ENMEME 552	Operations and Maintenance Engineering	4	40	3	60	100	
3	ENMEME 56X	Elective-I	4	40	3	60	100	
4	ENMEME 57X	Elective-II	4	40	3	60	100	
		Total	16	160		240	400	

Year : II

Part I

Teaching Schedule				Examination Scheme			Total	Remarks
S. N.	Course Code	Course Title	Credit	Assessment Marks	Final Exam			
					Duration Hours	Marks		
1	ENMEME 61X	Elective -III	4	40	3	60	100	
2	ENMEME 62X	Elective -IV	4	40	3	60	100	
3	ENMEME 601	Project	4	100			100	
		Total	12	180		120	300	

Year: II

Part II

Teaching Schedule				Examination Scheme			Total	Remarks
S. N.	Course Code	Course Title	Credit	Assessment Marks	Final Exam			
					Duration Hours	Marks		
1	ENMEME 651	Thesis	16	100			100	

**Note: Students will write a thesis in the fourth semester. However, the thesis work must start from the beginning of the third semester, which may be associated with the project work. Students can carry out the research thesis with one or more supervisors.**

### **Further Explanation about Elective Courses, Project and Thesis Works**

The selection of elective courses, and project and thesis titles/research are **recommended** to be based on the following:

- Elective streams represent specialization areas defined, respectively, as Design, Structures, Fluid, Aviation, Operations, Automotive, and Systems & Services.
- The project component will be approximately 3 months (full-time) duration.
- Thesis research topics are expected to include experimental works. Works that are mainly numerical and/or applied mathematical may also be permitted on a case-by-case basis. However, site survey and/or field visit for data collection, reliance on secondary data, postulations and/or hypothetical reasoning are **not recommended** as the primary research methodology of the thesis to earn this degree.

### **Eligibility and Degree Award:**

Eligibility: **BE in Mechanical/Industrial/Automobile/Aerospace Engineering or Equivalent**

Degree Award: **MSc in Mechanical Engineering**