



Mutah University
College of Graduate Studies

Master's Degree in Mechanical Engineering Thesis Track

Thesis Track: The number of credit hours for graduation is 33 hours, distributed as follows:

A: - Specialization Requirements Compulsory Credit Hours (15)	Course Code	Course Title	Credit Hours	Prerequisite
	0402735	Advanced Eng. Mathematics and Numerical Analysis	3	-
	0402724	Research Methodology	3	-
	0402711	Stress Analysis	3	-
	0402721	Thermo – Fluid Sciences	3	-
	0402716	Advanced Mechanical Vibrations	3	-

B: - Elective Major Requirements Credit Hours (9)	Course Code	Course Title	Credit Hours	Prerequisite
	0402713	Fracture Mechanics	3	-
	0402720	Renewable Energy Systems	3	-
	0402739	Advanced Mechanical Design	3	-
	0402712	Advanced Tribology	3	-
	0402714	Advanced Automatic Control	3	-
	0402715	Advanced Friction and Wear Theories	3	-
	0402730	Computational fluid Dynamics and Heat Transfer	3	-
	0402743	Composite and Ceramic Materials	3	-
	0402723	Advanced Thermodynamics	3	-
	0402736	Nano Technology	3	-
	0402717	Theory of Elasticity and plasticity	3	-
	0402725	Advanced Fluid Mechanics	3	-
	0402727	Air Conditioning Systems	3	-
	0402731	Gas Dynamics	3	-
0402737	Selective Research Subjects	3	-	
0402738	Advanced Manufacture Process	3	-	

- Thesis Preparation (Thesis Code): Equivalent to (9) credit hours, provided the student successfully passes the defence examination.
- The Dean, based on the recommendation of the Department Committee and the College Committee, may assign the student remedial courses not exceeding (9) credit hours. This must be documented in the admission letter, and the student is required to complete them during the first year.