



Mutah University
College of Graduate Studies

Master's Degree in Mechanical Engineering/ Renewable Energy 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	-
	0402740	Solar Energy	3	-
	0402720	Renewable Energy Systems	3	-
	0402753	Energy Management	3	-

B: - Elective Major Requirements Credit Hours (9)	Course Code	Course Title	Credit Hours	Prerequisite
	0402741	Energy Conversion and Efficiency	3	-
	0402760	Wind Energy	3	-
	0402761	Solar Photovoltaic (PV)	3	-
	0402759	Concentrated Solar Power	3	-
	0402742	Hydrogen Energy and Fuel Cell	3	-
	0402721	Thermo – Fluid Sciences	3	-
	0402730	Computational Fluid Dynamics and Heat Transfer, CFD	3	-
	0402763	Low Carbon Buildings	3	-
	0402762	Solar Desalination	3	-
	0402754	Modeling, Simulation and Optimization	3	-
	0402736	Nano Technology	3	-
	0402758	Bio-fuels	3	-
	0402765	Technical Feasibility and Economical Potential of Renewable Energy	3	-
	0402757	Energy Regulations	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.