

MASTER OF SCIENCE IN MECHANICAL ENGINEERING (MECV)

Objectives

The MSc. ME programme has the following general objectives:

- i) To enable postgraduate students undergo a programme of upgrading and updating their technical knowledge in a specialized field of mechanical engineering.
- ii) Introducing the postgraduate students to applied research relevant to the industrial needs of the country.
- iii) Produce postgraduates with a qualification sufficient to meet the needs of staff development of local Universities and technical colleges.

Duration

The minimum duration for the programme shall be two years and the maximum shall be three years.

Programme Structure

Year I: Semester I (All courses are compulsory)		CU
EMT 7102	Advanced Engineering Mathematics	3
EMT 7103	Computer Applications	4
MEC 7102	Instrumentation and Control	4
MEC 7103	Advanced Engineering Materials	4
MEC 7104	Quality Control and Management	3
Semester II (1 Compulsory Course & 4 Electives)		
TEC 7200	Research Methods (Compulsory Course)	3
Elective Courses		
MEC 7206	Extractive Metallurgy	4

MEC 7207	Advanced Manufacturing Processes	4
MEC 7208	Welding Technology	4
MEC 7209	Plastics Engineering	4
MEC 7210	Advanced Chemical Metallurgy	4
MEC 7211	Mechanics of Fracture and Fatigue	4
MEC 7212	Fuels, Furnaces and Refractories	4
MEC 7213	Plastic Deformation of Materials	4
MEC 7214	Operations Research and Management	3
MEC 7215	Applied Statistics	4
MEC 7216	Production Planning and Control	3
MEC 7217	Facility Location and Layout	3
MEC 7218	Human Resources Management	3
MEC 7219	CAD/CAM (Advanced manufacturing Technology)	4
MEC 7220	Plant Engineering	4
MEC 7221	Materials Handling and Management	3
MEC 7222	Energy Planning	3
MEC 7223	Renewable Energy Technology	4
MEC 7224	Air Conditioning and Refrigeration	4
MEC 7225	Convection Heat and Mass Transfer	4
MEC 7226	Conduction and Radiation Heat Transfer	4
MEC 7227	Heat Exchanger Design	4
MEC 7228	Combustion Engineering	4
Year II: Semesters 1 and II		
TEC 8101	Research Work and Dissertation	12

MASTER OF ENGINEERING (CIVIL) (MECV)

Programme Structure

The Master of Engineering (Civil) Degree shall be conducted by Coursework and Dissertation.

Duration

The minimum duration shall be two years.

Programme Structure

Year I: Semester I (All are Course Compulsory)		CU
TEC 7101	Principles of Management	3
EMT 7101	Computer Applications in Engineering	4
MEC 7101	Maintenance Engineering	3
CIV 7101	Advanced Mathematics	3
Semester II (1 Compulsory Course 3 Electives)		
TEC 7201	Business Administration 1 (Compulsory course)	3