



NEWPORTS INSTITUTE OF COMMUNICATIONS & ECONOMICS

BS Mechanical Engineering Technology

Program Duration: 04 Year

Admission requirements

12 Year of education, F.Sc Pre Engineering/ DAE/ A-Level or equivalent with minimum 2nd Division.

Deficiency; “Students with premedical, must pass deficiency courses of Mathematics of 6 credit hours in first 2 semesters”.

Entry Test/Interview is mandatory.

INTRODUCTION

Mechanical Engineering trains student on the Thermal Sciences, Manufacturing & Production Engineering, Mechanics, Design & Vibrations, Fluid Mechanics, Control Engineering, Power, Energy and Quality Control. It offers students an opportunity to study in a wide variety of subjects with practical training. Moreover, the program also includes the industrial tours, schedule of prestigious industries and organizations of public/private sectors, to enhance student exposure and experience. The curriculum includes Analytical tools, Creative Thought, Communication Skills and their applications in engineering to solve the engineering problems of the real world.

CAREER PROSPECTS

Different fields, industries, organizations need mechanical engineers abundantly e.g. Heavy Mechanical Complex, NDC, Suparco, PMO, Pak Air Force, Pakistan Army, PIA, Nuclear Energy Commission and many industries in private sector. Mechanical Engineers can pursue their careers in industries like Automotive, Power Generation, Manufacturing, Maintenance, Planning & Estimation, and Quality Control & Assurance.

Scheme of Study

Road Map
136

Total semesters: 08

Total Credit Hours:

| Semester I | | | Semester II | | |
|------------|-------------|----|-------------|-------------|----|
| S # | Course Name | CR | S # | Course Name | CR |



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|---------------------------|--|----|--|---------------------------|--|----|
| 1 | Islamic Studies / Professional Ethics | 2 | | 1 | Applied Mathematics- II | 3 |
| 2 | Applied Physics | 3 | | 2 | Pakistan Studies | 2 |
| 3 | Applied Mathematics-I | 3 | | 3 | Technical Drawing and CAD-1 | 4 |
| 4 | Applied Chemistry | 3 | | 4 | Applied Thermo- dynamics- 1 | 4 |
| 5 | Introduction to Computer Fundamentals | 3 | | 5 | Basic Electrical & Electronics | 4 |
| 6 | Workshop Technology | 3 | | 6 | | |
| Total Credit Hours | | 17 | | Total Credit Hours | | 17 |
| Semester III | | | | Semester IV | | |
| S # | Course Name | CR | | S # | Course Name | CR |
| 1 | Communication Skills | 3 | | 1 | Machine Design | 3 |
| 2 | CAD – II | 3 | | 2 | Fluid Mechanics | 4 |
| 3 | Industrial Material | 3 | | 3 | Engineering Statics | 3 |
| 4 | Mechanics of Material | 3 | | 4 | Probability and Statistics | 3 |
| 5 | Applied Thermo-dynamics - II | 3 | | 5 | Total Quality Management | 2 |
| | | | | 6 | Technical Report Writing | 3 |
| Total Credit Hours | | 15 | | Total Credit Hours | | 18 |
| Semester V | | | | Semester VI | | |
| S # | Course Name | CR | | S # | Course Name | CR |
| 1 | Heat Transfer | 3 | | 1 | Instrumentation and Control | 3 |
| 2 | I C Engine | 4 | | 2 | Mechanical Vibration | 3 |
| 3 | Dynamics | 3 | | 3 | Refrigeration & Air Conditioning | 3 |
| 4 | Manufacturing Processes | 3 | | 4 | Material Handling and Safety | 4 |
| 5 | Project Management | 3 | | 5 | Project | 3 |
| 6 | Economics | 2 | | 6 | Project (Continue) | 3 |
| Total Credit Hours | | 18 | | Total Credit Hours | | 19 |
| Semester VII | | | | Semester VIII | | |
| S # | Course Name | CR | | S # | Course Name | CR |
| 1 | Supervised Industrial / Field Training | 16 | | 1 | Supervised Industrial / Field Training | 16 |
| Total Credit Hours | | 16 | | Total Credit Hours | | 16 |