NED UNIVERSITY OF ENGINEERING & TECHNOLOGY

M. ENG. IN
COMPUTATIONAL ENGINEERING

Offered by:
Department of Automotive & Marine Engineering
Faculty of Mechanical & Manufacturing Engineering

The Chairperson
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What this Computational Engineering

Computational Engineering is a new and exciting discipline in which various scenarios of real life engineering problems are simulated and analyzed using modern computer tools, often coupled with high-performance computing for maximizing production and efficiency. This is considered as a third element in the development of knowledge after theory and experiment.

What this programme Offers

The department of Automotive & Marine Engineering is offering M.Engg. in Computational Engineering with specialization in:

- Thermo & Fluid Dynamics
- Mechanics of Materials
- Automotive Engineering.

The programme puts a strong focus on CAE (Computer Aided Engineering) and imparts relevant basics as well as up-to-date expert knowledge. The contents are strongly related to the practice and aim at working professionals and are designed such that equal weightage is given to theory as well as its implementation through software competence and this would enable the computational engineering graduates to immediately tackle the wide variety of real engineering problems in a shorter time.

Future Prospects:

There is hardly any discipline of engineering that does not use computers for modeling and problem solving. Computational engineers works in industry, research/strategic organizations, and academia. There is a high demand for computational engineers all around the world and one of the growing area in Pakistan specially for out-sourcing.

Computational Engineering around the world

Computational Engineering is offered in several universities around the world.

<table>
<thead>
<tr>
<th>University</th>
<th>Country</th>
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</thead>
<tbody>
<tr>
<td>The University of Tennessee at Chattanooga</td>
<td>USA</td>
</tr>
<tr>
<td>RWTH Aachen</td>
<td>Germany</td>
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<tr>
<td>The University of Texas at Austin</td>
<td>USA</td>
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<tr>
<td>University of Erlangen</td>
<td>Germany</td>
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<tr>
<td>University of Southampton</td>
<td>UK</td>
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<tr>
<td>TU Darmstadt</td>
<td>Germany</td>
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<tr>
<td>RUHR Universität Bochum</td>
<td>Germany</td>
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<tr>
<td>Stanford University</td>
<td>USA</td>
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Who should apply in Computational Engineering Programme

✓ Engineers interested / working in
  ✓ Knowing what it behind computer modeling & simulation.
  ✓ using Computer Aided Engineering (CAE).
  ✓ using software like ANSYS, CFX, CATIA, ABAQUS, GT Power
  ✓ Design Department in industry.
  ✓ Product development through PLM.
  ✓ Process industry, Strategic organizations & Academia.

Eligibility:

Bachelor of Engineering in Civil, Petroleum, Mechanical, Textile, Industrial & Manufacturing, Automotive, Materials, Metallurgy, Chemical and Bio-Medical Engineering.

For further details and course contents: Visit: [http://www.neduet.edu.pk/Automotive/index.html](http://www.neduet.edu.pk/Automotive/index.html)