## Update - 12.21 List of compulsory professions (The list is valid for both ME and MSc) At least one subject must be chosen from each group (A-D)

| Subject<br>Number | Subject Name                                   | Points | Group |
|-------------------|--|--------|-------|
| 036001            | Analytical Methods<br>in Mechanical Eng.1      | 4.0    | A     |
| 096327            | Nonlinear Models in<br>Operations<br>Research  | 3.5    | В     |
| 097140            | Advanced Project<br>Management<br>Techniques   | 3.5    | В     |
| 097151            | Facilities Design                              | 3.5    | В     |
| 096124            | Des. for<br>Manufacturability<br>and Assembly  | 3.5    | В     |
| 036020            | Computational<br>Geometry 1                    | 2.5    | С     |
| 036081            | Principles of Mems<br>Design and<br>Production | 2.0    | С     |
| 096120            | Quality Engineering                            | 3.5    | С     |
| 096121            | Reliability<br>Engineering                     | 3.5    | С     |
| 318422            | Advanced<br>Composite Materials                | 2.0    | D     |
| 038746            | Mech. Behavior of<br>Engineering<br>Materials  | 2.0    | D     |
| 036097            | Dynamics of<br>Composites                      | 3.0    | D     |

| 038805 | Compt. Micromech.<br>of Composite Mat.   | 3.0 | D |
|--------|--|-----|---|
| 036093 | Mechanics of<br>Composite Materials<br>1 | 3.0 | D |
| 318600 | Dielectric Mat.#<br>Structure Properties | 2.0 | D |

## **Elective professions**

| Subject Number | Subject Name                             | Points |
|----------------|--|--------|
|                |  |        |
| 036002         | Analytical Methods in Mechanical Eng. 2  | 3.0    |
| 036004         | Fracture Mechanics                       | 3.0    |
| 036013         | Process Optimization                     | 3.0    |
| 036014         | Metal Forming Processes                  | 3.0    |
| 036015         | Finite Element Methods in Mech.eng. 1    | 3.0    |
| 036045         | Computational Geometry and Cad Models 2  | 3.0    |
| 036057         | Info-Gap Anlaysis of Risk and Reliabilit | 3.0    |
| 036063         | Experimental Modeling of<br>Systems      | 3.0    |
| 038785         | Advanced Topics in Robotics              | 2.0    |
| 096125         | Applied Quality Assurance                | 2.5    |
| 096266         | User Experience in Interactive Systems   | 3.5    |
| 096310         | Applied Stochastic Processes             | 2.5    |
| 096324         | Service Engineering                      | 3.5    |

| 096335 | Optimization Under Uncertainty            | 3.5 |
|--------|---|-----|
| 096475 | Design and Analysis of Experime           | 2.5 |
| 096502 | Corporate Finance                         | 2.5 |
| 096520 | Microeconomic Theory 1                    | 3.5 |
| 096530 | Microeconomic Theory 2                    | 3.5 |
| 096582 | Advanced Topics in Economic               | 3.5 |
| 096586 | Econometrics                              | 3.5 |
| 096589 | Advanced Econometrics                     | 3.5 |
| 096912 | Introduction to Operational Risk          | 3.5 |
| 097122 | Reliability Management                    | 3.5 |
| 097136 | Ability Testing in Interactive<br>Systems | 3.5 |
| 097140 | Advanced Project Management<br>Techniques | 3.5 |
| 318000 | Ionic solid material properties           | 2.0 |
| 318235 | The Theory of Plastic<br>Deformation      | 2.0 |
| 318520 | Organic Electronics                       | 2.0 |
| 318600 | Dielectric Mat.# Structure<br>Properties  | 2.0 |
| 318820 | High Energy Density<br>Electrochemical    | 2.0 |
| 318822 | Science of Ceramic Materials              | 2.0 |
| 086901 | Intelligent Structural Systems            | 3.0 |
| 318722 | Properties of Crystalline Polymers        | 2.0 |
| 086650 | Servo Systems Design                      | 2.0 |
| 086651 | Radar Systemd Design                      | 2.0 |

| 086535 | Fracture Mechanics in Aero<br>Structures    | 3.0 |
|--------|---|-----|
| 318221 | Structure & Composition of Solid<br>Surface | 2.0 |
| 318724 | Polymer Blends# Structure and<br>Properties | 2.0 |