

## DEGREE OF MASTER OF ENGINEERING IN MECHANICAL ENGINEERING (07H30554)

Students must also comply with the University General Regulations and the Supplementary Regulations for the Degree of Master of Engineering

**All the courses listed below are prescribed for this degree**

| PROGRAMME YEAR 1 – 120 Credit Points                          |                                               |               |                                                               |                                   |               |
|---------------------------------------------------------------|-----------------------------------------------|---------------|---------------------------------------------------------------|-----------------------------------|---------------|
| Term 1                                                        |                                               |               | Term 2                                                        |                                   |               |
| Course Code                                                   | Course Title                                  | Credit Points | Course Code                                                   | Course Title                      | Credit Points |
| PD 1002                                                       | Getting Started at the University of Aberdeen | 0             | EG 1504                                                       | Engineering Mathematics 1         | 15            |
| EG 1008                                                       | Principles of Electronics                     | 15            |                                                               |                                   |               |
| EG 1010                                                       | CAD and Communication in Engineering Practice | 15            | EG 1510                                                       | Fundamental Engineering Mechanics | 15            |
| EG 1012                                                       | Fundamentals of Engineering Materials         | 15            | EG 1513                                                       | Circuit Analysis and Design       | 15            |
| Plus 15 credit points from courses of choice at Levels 1 or 2 |                                               |               | Plus 15 credit points from courses of choice at Levels 1 or 2 |                                   |               |

| PROGRAMME YEAR 2 – 120 Credit Points                          |                                    |               |                                                               |                                              |               |
|---------------------------------------------------------------|------------------------------------|---------------|---------------------------------------------------------------|----------------------------------------------|---------------|
| Term 1                                                        |                                    |               | Term 2                                                        |                                              |               |
| Course Code                                                   | Course Title                       | Credit Points | Course Code                                                   | Course Title                                 | Credit Points |
| EG 2004                                                       | Fluid Mechanics and Thermodynamics | 15            | EG 2501                                                       | Design and Computing in Engineering Practice | 15            |
| EG 2011                                                       | Process Engineering                | 15            | EG 2503                                                       | Electrical and Mechanical Systems            | 15            |
| EG 2012                                                       | Engineering Mathematics 2          | 15            | EG 2513                                                       | Solids and Structures                        | 15            |
| Plus 15 credit points from courses of choice at Levels 1 or 2 |                                    |               | Plus 15 credit points from courses of choice at Levels 1 or 2 |                                              |               |

| PROGRAMME YEAR 3 – 120 Credit Points |                                     |               |             |                               |               |
|--------------------------------------|-------------------------------------|---------------|-------------|-------------------------------|---------------|
| Term 1                               |                                     |               | Term 2      |                               |               |
| Course Code                          | Course Title                        | Credit Points | Course Code | Course Title                  | Credit Points |
| EG 3007                              | Engineering Analysis and Methods 1A | 15            | EA 3518     | Mechanics of Structures       | 15            |
|                                      |                                     |               | EG 3505     | Engineer in Society           | 10            |
| EM 3015                              | Stress Analysis A                   | 15            | EM 3511     | Dynamics 1                    | 15            |
| EM 3019                              | Fluid Mechanics                     | 15            | EM 3521     | Engineering Thermodynamics    | 10            |
| EM 3028                              | Engineering Materials               | 15            | EM 3522     | Design of Mechanical Elements | 10            |

| PROGRAMME YEAR 4 – 120 Credit Points |                                  |               |                                           |                                      |               |
|--------------------------------------|----------------------------------|---------------|-------------------------------------------|--------------------------------------|---------------|
| Term 1                               |                                  |               | Term 2                                    |                                      |               |
| Course Code                          | Course Title                     | Credit Points | Course Code                               | Course Title                         | Credit Points |
| EM 40JP                              | Dynamics 2                       | 15            | EG 45PE<br>OR<br>EG 45PF<br>OR<br>EG 4513 | Individual Project (MEng)            | 60            |
| EM 4011                              | Fluid Dynamics                   | 15            |                                           | Industrial Individual Project (MEng) |               |
| EM 4012                              | Heat, Mass and Momentum Transfer | 15            |                                           | Individual Project Abroad (MEng)     |               |
| EM 4013                              | Nonlinear Solid Mechanics        | 15            |                                           |                                      |               |

**PLEASE SEE OVER →**

| PROGRAMME YEAR 5 – 120 Credit Points |                                                        |               |                                                 |                                           |               |
|--------------------------------------|--------------------------------------------------------|---------------|-------------------------------------------------|-------------------------------------------|---------------|
| Term 1                               |                                                        |               | Term 2                                          |                                           |               |
| Course Code                          | Course Title                                           | Credit Points | Course Code                                     | Course Title                              | Credit Points |
| EG 501V                              | Computational Fluid Dynamics                           | 15            | EG 5565                                         | MEng Group Design                         | 30            |
| EG 501W                              | The Engineer in Society<br>(to be replaced in 2026/27) | 15            | EG 55P6                                         | Engineering Risk and Reliability Analysis | 15            |
| EM 501Q                              | Advanced Composite Materials                           | 15            | <b>Plus one course from the following four:</b> |                                           |               |
| EG 5071                              | Fire and Explosion Engineering                         | 15            | EG 551T                                         | Mathematical Optimisation                 | 15            |
|                                      |                                                        |               | EG 55F2                                         | Pipelines and Soil Mechanics              | 15            |
|                                      |                                                        |               | EG 55F9                                         | Riser Systems and Hydrodynamics           | 15            |
|                                      |                                                        |               | EG 55M1                                         | Finite Element Methods                    | 15            |

| Notes |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1.    | This programme is accredited by the IMechE as fully satisfying the educational base for a Chartered Engineer (CEng)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2.    | All course choices at level 2 and above are subject to students holding the appropriate pre-requisites.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 3.    | <p>Candidates seeking entry to the Junior Honours programme (Programme Year 3) must have accumulated, by award or recognition, or been exempted from, at least 240 credit points at levels 1 and 2, including 240 credit points from courses prescribed for this degree programme. Candidates who do not meet this progression requirement but who do meet the requirements for progression to Programme Year 3 of the DEGREE OF BACHELOR OF SCIENCE IN ENGINEERING (MECHANICAL) may transfer to this programme with a view to transferring back to an honours programme for the commencement of Programme Year 4.</p> <p>Candidates seeking to progress on, or transfer to, the MEng programme will, in addition to meeting the credit requirements set out in the General and Supplementary Regulations, be expected to meet the MEng GPA requirements as publicised in the School of Engineering Undergraduate Student Handbook.</p> |
| 4.    | When completing registration for Programme Year 4, candidates registered for this programme will be registered for either EG 45PE Individual Project (MEng) or EG 4513 Individual Project Abroad (MEng). Candidates who are allocated an Industrial Project through the project allocation conducted during Term 1 will then be transferred to EG 45PF Industrial Individual Project (MEng) as necessary.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |