

Summary Information

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| Module Code | 5502ICBTME |
| Formal Module Title | Fluid Mechanics and Hydraulics |
| Owning School | Engineering |
| Career | Undergraduate |
| Credits | 15 |
| Academic level | FHEQ Level 5 |
| Grading Schema | 40 |

Teaching Responsibility

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|-----------------------------------|
| LJMU Schools involved in Delivery |
| LJMU Partner Taught |

Partner Teaching Institution

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| Institution Name |
| International College of Business and Technology |

Learning Methods

| Learning Method Type | Hours |
|----------------------|-------|
| Lecture | 45 |
| Practical | 6 |
| Tutorial | 15 |

Module Offering(s)

| Display Name | Location | Start Month | Duration Number Duration Unit |
|--------------|----------|-------------|-------------------------------|
| APR-PAR | PAR | April | 12 Weeks |

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|---------|-----|-----------|----------|
| JAN-PAR | PAR | January | 12 Weeks |
| SEP-PAR | PAR | September | 12 Weeks |

Aims and Outcomes

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| Aims | This unit aims to develop learners' knowledge of the principles of fluid mechanics and the techniques used to predict the behaviour of fluids in engineering applications |
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After completing the module the student should be able to:

Learning Outcomes

| Code | Number | Description |
|------|--------|---|
| MLO1 | 1 | Demonstrate the understanding of basic concepts of fluid statics and dynamics. |
| MLO2 | 2 | Apply these concepts during problem solving. |
| MLO3 | 3 | Relate the theoretical concepts learned to practical aspects of fluid statics and dynamics. |
| MLO4 | 4 | Analyse and evaluate a practical fluid mechanics problem based on the concepts learned. |

Module Content

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|------------------------|--|
| Outline Syllabus | Governing equations in fluid mechanics Ideal fluid flow Viscous flow Dimensional analysis and similarity theory Fluid power transmission systems Lubrication Fluid machinery |
| Module Overview | |
| Additional Information | |

Assessments

| Assignment Category | Assessment Name | Weight | Exam/Test Length (hours) | Module Learning Outcome Mapping |
|---------------------|--------------------------|--------|--------------------------|---------------------------------|
| Exam | Examination | 60 | 2 | MLO1, MLO2 |
| Report | Practical/Lab assignment | 40 | 0 | MLO3, MLO4 |

Module Contacts

Module Leader

| Contact Name | Applies to all offerings | Offerings |
|--------------|--------------------------|-----------|
| Karl Jones | Yes | N/A |

Partner Module Team

| Contact Name | Applies to all offerings | Offerings |
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