



FACULTY OF APPLIED SCIENCES
BACHELOR OF SCIENCE IN COMPUTING
LEARNING MODULE OUTLINE

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|-----------------------|---|---------------|-----------------------|
| Academic Year | 2024/2025 | Semester | 1 |
| Module Code | EDUC411 | | |
| Learning Module | Teaching Practice I (IT in Secondary Education) | | |
| Pre-requisite(s) | Nil | | |
| Medium of Instruction | English | | |
| Credits | 3 | Contact Hours | 45 hrs |
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MODULE DESCRIPTION

This module aims to support student teachers in developing their teaching skills in information technology and prepare them for a successful teaching experience. This will be achieved through engagement in pedagogical issues and the application of practical teaching skills. The module requires significant personal involvement and time. Student teachers will observe school classes, design and engage in classroom teaching of information technology, and also carry out reflective writing on their observation and teaching.

MODULE INTENDED LEARNING OUTCOMES (ILOS)

On completion of this learning module, students will be able to:

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|-----|--|
| M1. | Acquire self-learning and problem-solving skills in classroom teaching; (SM3p, EP4p, EP6p) |
| M2. | Organise and manage classroom teaching with specific scope/time requirements; (D5p, ET3p, ET6p, EP3p, EP5p, EP6p) |
| M3. | Identify and use appropriate communication skills, instructional techniques, media and methods; (D3p, D6p, EP2p, EP4p) |
| M4. | Write formal documents, such as lesson plans and a syllabus. (D5p, D6p, EP2p, EP4p) |

These ILOs aims to enable students to attain the following Programme Intended Learning Outcomes (PILOs):

| PILOs | M1 | M2 | M3 | M4 |
|--|----|----|----|----|
| P1. Select and apply proven methods, tools and techniques to the effective and efficient implementation of information systems; | | | | |
| P2. Evaluate computer systems in a local area network, and understand the additional requirements for connection to other networks through wide area networks; | | | | |
| P3. Be competent in system development in the Internet and the web platform; | | | | |



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|------|--|---|---|---|---|
| P4. | Work independently to design and implement a relational database, with an emphasis on how to organise, maintain and retrieve information from a DBMS; | | ✓ | | |
| P5. | Acquire essential knowledge in specific fields of computing disciplines including multimedia, security and artificial intelligence; | | | | |
| P6. | Acquire the perceptive skills needed to understand information presented in the form of UML diagram, flow chart or other industry standard formats; | | | | |
| P7. | Understand the need for and use of the necessary mathematical techniques; | | | | |
| P8. | Work independently to develop an understanding of, and the knowledge and skills associated with the general support of computer systems and networks; | | | | |
| P9. | Work as an effective member of a team in the analysis, design and development of software systems; | | | | |
| P10. | Use project planning and management techniques in systems development; | | | | |
| P11. | Understand the fundamental and operational issues of computer systems in business environments; | | | | |
| P12. | Equip with adequate written, oral communication and interpersonal skills; | | | ✓ | ✓ |
| P13. | Build the capacity and desire for lifelong learning and to learn advanced and emerging technologies on one's own; | | | | |
| P14. | (For Enterprise Information Systems specialization) Gain an in-depth understanding of the information technology related to enterprise information systems, with an emphasis on development of such systems to support business processes; | | | | |
| P15. | (For Gaming Technology specialization) Acquire the general and advanced knowledge of current technologies and operating environment in the gaming industry; | | | | |
| P16. | (For Computer Education specialization) Acquire the general and practical knowledge of computer education and its practicing environment in secondary education. | ✓ | | | |

TEACHING AND LEARNING ACTIVITIES

In this learning module, students will work towards attaining the ILOs through the following teaching and learning activities:

| Teaching and Learning Activities | M1 | M2 | M3 | M4 |
|----------------------------------|----|----|----|----|
| T1. Preparing lesson plans | | | ✓ | ✓ |
| T2. Preparing lesson materials | | | | ✓ |
| T3. Classroom teaching | ✓ | ✓ | ✓ | |



ATTENDANCE

Attendance requirements are governed by the Academic Regulations Governing Bachelor's Degree Programmes of the Macao Polytechnic University. Students who do not meet the attendance requirements for the learning module shall be awarded an 'F' grade.

ASSESSMENT

In this learning module, students are required to complete the following assessment activities:

| Assessment Activities | Weighting (%) | AHEP3 LOs | ILOs to be Assessed |
|------------------------|---------------|---|---------------------|
| A1. Weekly reports | 10% | SM3p, D6p, EP4p, EP6p | M3, M4 |
| A2. Lesson plans | 10% | SM3p, D5p, EP2p | M3, M4 |
| A3. Midterm evaluation | 30% | SM3p, D3p, D5p, D6p, ET3p, ET6p, EP2p, EP3p, EP4p, EP5p, EP6p | M1, M2, M3 |
| A4. Final evaluation | 30% | SM3p, D3p, D5p, D6p, ET3p, ET6p, EP2p, EP3p, EP4p, EP5p, EP6p | M1, M2, M3 |
| A5. Reflective essay | 20% | SM3p, D6p, EP4p | M3, M4 |

The assessment will be conducted following the University's Assessment Strategy (see www.mpu.edu.mo/teaching_learning/en/assessment_strategy.php). Passing this learning module indicates that students will have attained the ILOs of this learning module and thus acquired its credits.

No re-sit examination is provided for the teaching practice module. Please note that if you fail the module, you have to retake it in the other academic year. Since this module is offered in year 4, failing the module will delay the award of the degree.

REQUIRED READINGS

There is no official text for this module. A self-learning ability is essential. Students are encouraged to search for relevant reference by themselves. The College supervisor will recommend suitable references for individual projects on a required basis.

STUDENT FEEDBACK

At the end of every semester, students are invited to provide feedback on the learning module and the teaching arrangement through questionnaires. Your feedback is valuable for instructors to enhance the module and its delivery for future students. The instructor and programme coordinators will consider all feedback and respond with actions formally in the annual programme review.

ACADEMIC INTEGRITY

The Macao Polytechnic University requires students to have full commitment to academic integrity when engaging in research and academic activities. Violations of academic integrity, which include but are not limited to plagiarism, collusion, fabrication or falsification, repeated use of assignments and cheating in examinations, are considered as serious academic offenses and may lead to disciplinary actions. Students should read the relevant regulations and guidelines in the Student Handbook which is distributed upon the admission into the University, a copy of which can also be found at www.mpu.edu.mo/student_handbook/.