# Subject Description Form

<table>
<thead>
<tr>
<th>Subject Code</th>
<th>COMP102</th>
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<tbody>
<tr>
<td>Subject Title</td>
<td>Enterprise Information Technology</td>
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<tr>
<td>Credit Value</td>
<td>3</td>
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<tr>
<td>Level</td>
<td>1</td>
</tr>
<tr>
<td>Pre-requisite / Co-requisite/ Exclusion</td>
<td>Nil</td>
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</tbody>
</table>

## Objectives

This subject provides students with the concept of information systems and their role in today’s enterprises. This subject can be taken with or without having taken COMP100 as a pre-requisite. It is suitable for all students.

## Intended Learning Outcomes

Upon completion of the subject, students will be able to:

(a) understand the basic concepts and activities of enterprise information system; measuring success of any information system, competitive strategies of enterprise information system.

(b) understand the input, output, storage, calculation technology; application software and system software; database management principles and approaches; computer network technology and open systems; relationship between information technology and development of enterprise.

(c) understand enterprise information system development; system development lifecycle; system investigation, analysis, design, implementation, and maintenance.

(d) gain hands-on experience on selecting and using real enterprise information software for different applications.

## Alignment of Programme Outcomes:

Programme Outcome 1: This subject contributes to having students practice their communication skills and demonstration ability with project presentation.

Programme Outcome 2: This subject contributes to forming the global outlook that can affect the way computing systems are developed and used.

Programme Outcome 3: This subject contributes to understand and value ethical issues in design and development of computing systems.

Programme Outcome 4: This subject contributes to developing student critical thinking through lectures and lab exercises on solving problems. They will also practice choosing and evaluating the solutions for different technique problems.

Programme Outcome 5: This subject contributes to problem solving with programming skills through lab exercise and project with proper design and implementation.
Programme Outcome 6: This subject contributes to follow closely the advancement in information technology and their impact to the industrial need.
Programme Outcome 7: This subject contributes to team work with group-based project for students to practice team spirit.
Programme Outcome 8: This subject contributes to understand the commercial needs from both computing and management perspectives and be able to develop information systems that are useful to enterprises.

| Subject Synopsis/Indicative Syllabus | 1. Fundamentals of enterprise information system  
Basic concepts of enterprise information system; activities of information system and cybernetic system; measuring success of an information system; classification of information system;  
2. Competitive strategies of information system  
Cost leadership; differentiation strategy, innovation strategy, growth strategy, alliance strategy  
3. Computer hardware and its application in enterprise  
History of computer hardware; input technology, output technology, storage technology, calculation technology; computer hardware development and enterprise information system.  
4. Computer software and its application in enterprise  
Application software definition, classification, development; system software definition, classification, development; computer software development and enterprise information system.  
5. Database and its application in enterprise  
Motivation of data management using database; database management approach; database development approaches; computer database and its applications in enterprise information system.  
6. Networking and its application in enterprise  
Basic concepts of computer network; telecommunication network components; Open system, internet and intranet; computer network development and enterprise information system.  
7. Enterprise information system development  
System development lifecycle; system investigation, analysis, design, implementation, maintenance. |

| Teaching/Learning Methodology | A mix of lectures and lab sessions is used to deliver the various topics in this subject. Lectures are conducted to initiate students with the concepts and techniques of enterprise information technology. Students are given the opportunity to gain hands-on experience on operating enterprise information software during the laboratory sessions. |
Continuous assessments consist of a project, lab exercises, presentation, which are designed to facilitate students to achieve intended learning outcomes. Lab exercise is designed to encourage students to acquire deep understanding of the relevant knowledge, practice in order to enrich their hands-on experience with various software tools. Presentation is designed to facilitate students to show their group performances on applied different information techniques to enterprise applications. The project is designed to enhance students’ ability to acquire the understanding and using different knowledge, principles, techniques, tools to solve a real problem through team.

Examination will evaluate student’s understanding and usage of enterprise information technologies.

### Student Study Effort Required

**Class contact:**
- Lecture: 28 Hrs.
- Laboratory: 14 Hrs.

**Other student study effort:**
- Review the lecture: 28 Hrs.
- Review the lab: 14 Hrs.
- Prepare the presentation: 8 Hrs.
- Design and implement the project: 12 Hrs.
- Prepare the examination: 10 Hrs.

Total student study effort: 114 Hrs.

### Reading List and References

**Reference Books:**

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