

**DEREE COLLEGE SYLLABUS FOR: CS 1070 INTRODUCTION TO INFORMATION SYSTEMS**

**UK LEVEL: 4**  
**UK CREDITS: 15**  
**US CREDITS: 3/3/3**

(Updated Spring 2025)

<p><b>CATALOG DESCRIPTION:</b></p>	<p>Principles of information systems. Social and ethical issues in using information and communication technologies (ICT). Present and future trends in information technology. Manage, communicate, create, and analyse information. Collaborate and share digital content using current technologies. Develop critical thinking and problem-solving skills through hands-on projects, developing digital literacy skills and capabilities.</p>													
<p><b>RATIONALE:</b></p>	<p>This course provides fundamental knowledge in information systems and digital literacy. Students develop competencies across multiple dimensions including hardware, software, networks, AI technologies, digital identity, information literacy, and ethical computing. The course emphasizes hands-on experience through extensive laboratory work, preparing students for the digital demands of different careers while developing critical thinking and collaborative skills.</p>													
<p><b>LEARNING OUTCOMES:</b></p>	<p>As a result of taking this course, the student should be able to:</p> <ol style="list-style-type: none"> <li>1. Identify and categorize components and functions of information and communication technologies (ICT)</li> <li>2. Analyze and discuss the application of information and communication technologies in different disciplines and contexts from multiple perspectives Use current technologies for digital creation, communication, collaboration, and learning to address real-life problems.</li> </ol>													
<p><b>METHOD OF TEACHING AND LEARNING:</b></p>	<p>In congruence with the teaching and learning strategy of the college, the following tools are used:</p> <ul style="list-style-type: none"> <li>➤ Lectures and class discussions, problem-solving sessions and review of cases taken from the real world and applicable to specific theoretical concepts.</li> <li>➤ Hands-on flipped classroom (Laboratory) practical learning sessions to build the digital literacy skills</li> <li>➤ Office hours held by the instructor to provide further assistance to students.</li> <li>➤ Use of the Blackboard Learning platform (communication, posting of lecture notes / assignments' instructions / timely announcements, online submission of assignments, etc).</li> <li>➤ Use of eLearning tools such as simulation platforms, clickers, video tutorials, etc.</li> </ul>													
<p><b>ASSESSMENT:</b></p>	<p><b>Summative:</b></p> <table border="1" data-bbox="501 1686 1442 1895"> <tr> <td data-bbox="501 1686 971 1821">First Assessment - Coursework</td> <td data-bbox="971 1686 1075 1821"><b>40%</b></td> <td data-bbox="1075 1686 1442 1821">Coursework on digital creation, communication, data analysis and presentation</td> </tr> <tr> <td data-bbox="501 1821 971 1895">Final Assessment - Written Examination (in class, 2 hours)</td> <td data-bbox="971 1821 1075 1895"><b>60%</b></td> <td data-bbox="1075 1821 1442 1895">Answers to questions with choice</td> </tr> </table> <p><b>Formative:</b></p> <table border="1" data-bbox="501 1957 1299 2063"> <tr> <td data-bbox="501 1957 1109 1995">Short writing assignments</td> <td data-bbox="1109 1957 1299 1995"><b>0%</b></td> </tr> <tr> <td data-bbox="501 1995 1109 2033">Take-home lab assignments</td> <td data-bbox="1109 1995 1299 2033"><b>0%</b></td> </tr> <tr> <td data-bbox="501 2033 1109 2063">Project-based collaborative sessions</td> <td data-bbox="1109 2033 1299 2063"><b>0%</b></td> </tr> </table>		First Assessment - Coursework	<b>40%</b>	Coursework on digital creation, communication, data analysis and presentation	Final Assessment - Written Examination (in class, 2 hours)	<b>60%</b>	Answers to questions with choice	Short writing assignments	<b>0%</b>	Take-home lab assignments	<b>0%</b>	Project-based collaborative sessions	<b>0%</b>
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	<p>The formative assessment(s) aim to prepare students for the summative ones.</p> <p>The First Assessment tests Learning Outcome 3. The Final Assessment tests Learning Outcomes 1 and 2.</p> <p>Students are required to resit failed assessments in this module.</p> <p>(Guidelines and assessment rubrics are distributed on the first day of classes along with the course outline.)</p>
<p><b>INDICATIVE READING:</b></p>	<p><b>REQUIRED READING:</b></p> <p>Coulthard, G. Computing Now, McGraw Hill, latest edition – eTextbook</p> <p><b>RECOMMENDED READING:</b></p> <p>Shelly B. Gary, Vermaat E. Misty. Discovering Computers: Fundamentals. Shelly Cashman Series, Course Technology, latest edition.</p> <p>O’ Leary. Computing Essentials, McGrawHill, latest edition.</p> <p>Journal of Information, Information Technology &amp; Organizations</p> <p>Information Systems Journal, Information Today Journal</p> <p>Computers &amp; the Humanities Academic Journal</p> <p>Interacting with Computers Academic Journal</p> <p>Journal of Humanities &amp; Arts Computing: A Journal of Digital Humanities</p>
<p><b>INDICATIVE MATERIAL:</b> (e.g. audiovisual, digital material, etc.)</p>	<p><b>REQUIRED MATERIAL:</b> N/A</p> <p><b>RECOMMENDED MATERIAL:</b> N/A</p>
<p><b>COMMUNICATION REQUIREMENTS:</b></p>	<p>Use of appropriate academic conventions as applicable in oral and written communications.</p>
<p><b>SOFTWARE REQUIREMENTS:</b></p>	<ul style="list-style-type: none"> <li>• MS-Office 365 applications</li> <li>• Cloud Computing tools</li> <li>• GenAI tools</li> <li>• SIMnet online service</li> </ul>
<p><b>WWW RESOURCES:</b></p>	<p><b>Tech News &amp; Trends:</b></p> <p><a href="#">Information Week</a>  <a href="#">The Verge</a>  <a href="#">TechCrunch</a>  <a href="#">WIRED</a>  <a href="#">Digital Trends</a></p> <p><b>Digital Skills &amp; Learning:</b></p> <p><a href="#">Microsoft Learn: Build skills that open doors in your career</a>  <a href="#">LinkedIn Learning</a></p>

[Codecademy](#)  
[Coursera Information Technology](#)

**Privacy & Security:**

[Data Privacy Settings, Controls & Tools - Google Safety Center](#)  
[Digital Literacy](#)  
[EU Digital Identity Wallet Home - EU Digital Identity Wallet -](#)

**AI & Emerging Tech:**

[AI Google Education](#)  
[Fast AI](#)

**INDICATIVE CONTENT:**

I. Theoretical and Descriptive Part:

Thematic unit 1: Essentials

- Information processing cycle, data vs. information
- Computer security and online privacy
- Social issues in using information, computing ethics
- AI fundamentals

Thematic unit 2: Technologies

- Looking inside – computer components
- System and application software
- The Internet and the web, cloud computing
- Modern networks and connectivity
- IoT, wearable technologies
- AI and applications

Thematic unit 3: Applications

- Computers in society
- Meeting your computing needs
- Programming logic
- No-code development

Thematic unit 4: Users

- The user's role
- User interfaces, interaction and experience
- Digital identity

Thematic unit 5: Future

- The future of computing
- Putting it all together (critical reflection)

II. Laboratory practical sessions:

1. World Wide Web

- a. Find, capture, evaluate and manage information
- b. Use of social networks and privacy issues
- c. Collaboration and cloud storage, blogs & wikis
- d. Blackboard CMS

2. Information presentation

3. Spreadsheet management

4. Web publishing (blogging, web application services)

5. Word processing

6. Using AI responsibly

7. No-Code development

8. Digital Media Literacy and Collaborative Fact-Checking