

Content

| Course Code | Course Name | Semester | Theory | Practice | Lab | Credit | ECTS |
|-------------|--------------------------------|----------|--------|----------|-----|--------|------|
| IND453 | Management Information Systems | 7 | 2 | 1 | 0 | 2,5 | 5 |

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| Prerequisites | |
| Admission Requirements | |

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| Language of Instruction | |
| Course Type | Compulsory |
| Course Level | Bachelor Degree |
| Objective | This course introduces industrial engineering students to the strategic and operational uses of management information systems (MIS). The course covers information technology (IT) architecture, business application systems, productivity systems, and Internet-based tools for businesses and customers. Students learn how to evaluate the cost effectiveness and business value of Information Systems. We approach MIS from both managerial and technical perspectives, as understanding both perspectives is essential to business success. |
| Content | <p>Week 1: Information Systems in the global business world</p> <p>Week 2: Information Systems, Organizations and Strategies</p> <p>Week 3: Information Technology Infrastructure and Emerging Technologies; Telecommunications, the Internet, and Wireless Technology</p> <p>Week 4: Planning and development of information systems</p> <p>Week 5: E-Business, E-Commerce, E-Marketplaces; M-Business, M-Commerce</p> <p>Week 6: Foundations of Business Intelligence: Databases and Information Management ; Knowledge Management</p> <p>Week 7: Enhancing decision making - Decision Support Systems</p> <p>Week 8: Midterm</p> <p>Week 9: Operational Excellence and Enterprise Resource Planning (ERP)</p> <p>Week 10: Supply chain and customer loyalty: Application of information systems for companies</p> <p>Week 11: Design of Information Systems</p> <p>Week 12: Information Systems Project Management, Managing Global Information Systems</p> <p>Week 13: Securing Information Systems, Ethical and Social Issues in Information Systems</p> <p>Week 14: Presentation of students' projects</p> |
| References | <p>1. Laudon, K.D., Laudon, J.P., Management Information Systems, Prentice Hall, 11th edition, 2009</p> <p>2. Reix, R., Systèmes d'Information et Management des Organisations, Vuibert, 2004.</p> |

Theory Topics

| Week | Weekly Contents |
|------|--|
| 1 | Information Systems in the global business world |
| 2 | Information Systems, Organizations and Strategies |
| 3 | Information Technology Infrastructure and Emerging Technologies; Telecommunications, the Internet, and Wireless Technology |
| 4 | Planning and development of information systems |
| 5 | E-Business, E-Commerce, E-Marketplaces; M-Business, M-Commerce |
| 6 | Foundations of Business Intelligence: Databases and Information Management ; Knowledge Management |
| 7 | Enhancing decision making - Decision Support Systems |
| 8 | Midterm |
| 9 | Operational Excellence and Enterprise Resource Planning (ERP) |
| 10 | Supply chain and customer loyalty: Application of information systems for companies |
| 11 | Design of Information Systems |
| 12 | Information Systems Project Management, Managing Global Information Systems |
| 13 | Securing Information Systems, Ethical and Social Issues in Information Systems |
| 14 | Presentation of students' projects |