EE8061 INNOVATION AND TECHNOLOGY MANAGEMENT
Academic Units: 3
Contact Hours (per week) | 36
Pre-requisite | -

Objective
The course aims to provide a broad understanding of the dynamics of technological development through innovation and the related management issues and practices.

Contents

Textbook

EE8064 INTELLECTUAL PROPERTY FOR ELECTRONIC ENGINEERS
Academic Units: 3
Contact Hours (per week) | Lecture – 26 ; Tutorial – 13
Pre-requisite | -

Objective
The course aims to equip students with essential knowledge about Intellectual Property (IP) and its significance in the electronics/semiconductor/IC design industry. There is a need to move towards innovation and enterprise, and research and development to rejuvenate future economic growth. The knowledge-intensive electronics industry is one such area that provides a realm for innovation, and therefore, its chemistry with the IP Law is important. The search for new and more innovative electronic gadgets can continue to be pursued only by acquiring legal protection via IP rights. As a result, students should equip themselves with substantial understanding of the numerous forms of IP and the governing legal principles to efficiently protect and exploit their own inventions, on top of thriving on the ownership of IP.

Contents

Textbook

EE8065 MANAGING YOUR MONEY
Academic Units: 3
Contact Hours (per week) | Lecture – 39
Pre-requisite | -

Objective
Personal Finance is having the financial Intelligence to read about, analyse, manage, and communicate the personal financial conditions that affect an individual’s material well-being. It includes the ability to make financial choices, discuss money and financial issues, plan for the future, and respond competently to life events that affect everyday financial decisions, including events in the general economy.

Contents
Specifically the course is designed to: (a) Provide a basic understanding of financial concepts as they are applied to the personal finance; (b) Help students develop a working knowledge of and ability to apply financial analysis to make personal financial decisions; (c) Help students understand the influence of financial decisions on their future financial health.

EE8084 CYBER SECURITY
Academic Units: 3
Contact Hours (per week) | 39
Pre-requisite | -

Objective
The objective of this course is to provide students with basic appreciation and understanding of the underlying security issues and implications of the use of various networked systems and electronic devices in the modern cyber-society from a user perspective. Topics to be covered include overview of information systems and devices in a global network environment, threats to information systems and devices, security models, and concepts for secrecy, integrity and availability. Other topics of security concerns will also be explored: evaluations of secure information systems, security requirements analysis, security management policies, security trends and emerging technologies.

References
Contents

Textbook

References

EE8085 ELECTRICITY FOR MODERN SOCIETY
Academic Units: 3
Contact Hours (per week) | 39
Pre-requisite | -

Objective
The objective of this course is to impart to students knowledge pertaining to the generation and distribution of electricity, and how electricity usage impacts on a modern society. Essential aspects of power system technology, electricity utilization and recent developments on electricity industry restructuring would be discussed. Energy conservation and safety issues will also be covered.

Contents

References

EE8086 ASTRONOMY – STARS, GALAXIES AND COSMOLOGY
Academic Units: 3
Contact Hours (per week) | 39
Pre-requisite | -

Objective
The basic goal of this course is to give students a fundamental understanding of astronomy. Through the course, the students will learn about the birth of the universe, the origin of galaxies, the evolution of stars and the formation of planets. Our solar system will be one of the main topics to be studied. Some unanswered mysteries of the universe and mankind will be discussed and hopefully lead the students to further their own exploration. During this course, the diverse facts that form the context of a science will be delivered. During the course, students will also have opportunities to participate in various practical sessions and trips may be organized where appropriate.

Contents
The origin of modern astronomy – An introduction. Learn to read the stars. Overview of the solar system. The beginning and life of stars. The mysteries ahead. The future of space exploration.

Textbook

References

**EE8087 LIVING WITH MATHEMATICS**

Academic Units: 3  
Contact Hours (per week) | 26  
Pre-requisite | -

**Objective**

Mathematics plays a fundamental role in everyday life. The purpose of this course is to explore the various topics of mathematics, e.g. algebraic equations, trigonometry, conic sections, functions, differentiation and integration, which have direct applications in real world problems. Students will learn (i) how to translate real life problems into appropriate mathematical context and (ii) skills and techniques for solving these problems.

**Contents**


**References**


**EE8092 DIGITAL LIFESTYLE**

Academic Units: 3  
Contact Hours (per week) | 39  
Pre-requisite | -

**Objective**

iPod and MP3 players, 3G mobile phones, Multi-megapixel digital cameras, Spy cameras, 3CCD video camcorders, Intel Pentium Core-Duo Processors, Xbox/Playstation, LCD/Plasma/HD TVs, and Dolby Digital Surround Sound play a big part in our lives today, but do you really know how these digital gadgets and technologies work? Do you know how to choose among the various brands and features that best suit your budget and requirements? Enroll into this course, and you won't be baffled by salespersons, advertisements and terminologies. The digital gadgets and lifestyle covered in this course include: Home Entertainment Systems, Game Consoles, Digital Audio Players and Systems, Digital Cameras and Video Camcorders, Personal Computers, Mobile Phones and PDA.

**Contents**

Home entertainment systems and game consoles. Digital audio systems. Digital cameras and video camcorders. Personal computers. Mobile phones and PDA.

**Textbooks**


**EE8093 ENERGY DEVICES FOR SUSTAINABLE URBAN ENVIRONMENT**

Academic Units: 3  
Contact Hours (per week) | 39  
Pre-requisite | -

**Objective**

This course will introduce students to the basic operating principles and applications of photovoltaic devices used for solar energy conversion, thermoelectric devices for energy harvesting and electrochemical devices for renewable energy storage.

**Contents**


**Textbooks**


References

IC9101 INTERNET FUNDAMENTALS

Academic Units: 3
Contact Hours (per week) | 26
Pre-requisite | -

Contents

Textbooks

Reference

IC9103 E-COMMERCE TECHNOLOGY

Academic Units: 3
Contact Hours (per week) | 26
Pre-requisite | -

Contents

Textbook

References
1. Efraim Turban, Jae K. Lee, David King, Ting Peng Liang and Deborrah Turban, *Electronic Commerce 2012: A Managerial and