

Program: BS(CS)-VI
Course Name: Professional Practices
Course Code: GE-511
Credit Hours: 03
Total Weeks: 16
Total Hours: 48

Course Objectives

Professional Practice is where a student is required to extend his/her knowledge and skills in a practical environment.

This course is designed to understand the problems and difficulties and issues associated with specifying, designing and building high quality large software systems. To discuss the management, professional and ethical issues of software development. To understand the context, ethical, social, legal, financial and organizational issues in which Professional Information Systems Practitioners work. To do your work with professionalism & ethics & complete your project by following Project Management processes & techniques.

To familiar the students with software development skills Visual Basic.Net are also introduced. At the end of this course the students will be able to plan out a complete project, using latest tools like MS Project.

Week-1

Introduction to Software Engineering

- History of S/w Engineering
- Software, Software cost, Software Crisis
- Professional and ethical responsibility
- Issues of professional responsibility
- Ethical dilemmas

Week-2 & 3

Legal Issues

Intellectual property rights

- Intellectual property Issues
- Copyright and Industrial Property
- Trade Marks and laws relating to designs
- Software Protection, Piracy and ownership
- Software Licensing and Methods of licensing

Week - 4

- Dealing with Copyright & Originality
- Exception to Copyright infringement
- Electronic publishing
- Copyright problems posed by electronic publishing

Week-5 & 6

Other Professional Issues

Avoiding computer misuse

- Hacking, unauthorized access
- Types of Computer Crime
- Introduction of Viruses
- Fraud and types of Computer Fraud
- Cyber crime

Week-7

Project Management

- Objectives of Project Management
- Project & Operation
- Project Management
- Stages of Project Management
- Triple constraint of Project Management
- The context of Project Life Cycle

Week-8 & 9

Knowledge Areas of Project Management

- The Project Integration Management
- Project Scope Management
- Project Time Management
- Project Cost Management
- Project Quality Management
- Project Human Resource Management
- Project Communications Management
- Project Risk Management
- Project Procurement Management

Week-10 & 11

Project management process

- Project processes
- Process groups
- Process interactions
- Customizing process interactions
- Mapping of project management processes
- Ms Project Implementation & use in Lab.

Week-12

Introduction to Visual Basic.Net

- Introduction to VB.Net
- Evolution of VB to VB.Net
- Microsoft .Net Strategy features & object technology
- .NET Framework and the Common Language Runtime
- IDE & its terms

- Syntax & logical Errors
- Run time & Compile Time Errors
- Console application & Window application
- Console Programming basics
- Looping and Decision Control Structures
- Window Application
 - Label
 - Frame
 - Check Box
 - Combo Box
 - Command Button
 - List Box
 - Text Box
- Database connectivity
- **Visual Studio Implementation in Lab**

Week-13

Contract issues and Law

- Basic understanding of the Types of Agreements in large computerization projects
- Implementation Agreements, License Agreements & Maintenance agreements
- Enforcement issues, dispute resolution, & legislative action.

Week-14

Ethics and Codes of Professional Conduct

- Background (Relationship between Code of Ethics and Professional Conduct)
- **Codes of Conduct of Professional Bodies**
 - British Computer Society BCS, UK Australian Computer Society ACS, Institute of Electrical & Electronic Engineering (IEEE).

Week-15

Industrial Relations

- Economic context and Human Resources Management

- The financial structure of companies
- Sources of finance
- Human resource issues
 - Recruitment and selection
 - Staff training and development

- Job evaluation
- Appraisal scheme
- Remuneration policies
- Dismissal and Grievances
- Contracts of employment
- Anti-discriminatory laws
- Discrimination on the grounds of sex, race, religion etc.

Week-16

Duties of a professional

- Duties to client, Duties to Employer, Duties to profession, Duties to society
- Accountability for quality
- Timeliness and use of resources

Total Marks:

100

Recommended Books

1. Your Best recommended computer text book is Google (internet).
2. PROFESSIONAL ISSUES IN SOFTWARE ENGINEERING--- by M.F. Bott, J.A. Coleman, J. Eaton, and D. Rowland 3rd Ed.
3. PROFESSIONAL AWARENESS IN SOFTWARE ENGINEERING --- by Myers C. McGraw- HILL
4. THE ESSENCE OF PROFESSIONAL ISSUES IN COMPUTING --- by R.Ayres
5. SOFTWARE ENGINEERING--- A PRACTITIONER'S APPROACH --- by R.Pressman McGraw- HILL
6. A GUIDE TO PROJECT MANAGEMENT BODY OF KNOWLEDGE(PMBOK GUIDE) latest edition
7. MASTERING VISUAL BASIC-6

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