

Internet and Web-based Technologies (4-0-0)(IT60102)

Instructors:

Prof. S. Misra

Prof. K. S. Rao

Course Contents:

- (i) Name services and configuration: DNS, DHCP, X500 directory services, LDAP.
- (ii) Internet architecture: Routing protocols, physical structure
- (iii) Internet security - basics of authentication and encryption, SSL, Digital Signature, Kerberos.
- (iv) Application Layer protocols – Telnet, FTP, SMTP/POP3, HTTP
- (v) Network management: SNMP. CGI scripts, Scripting Languages - Perl, PHP, Javascript, VBScript.
- (vi) IPV6 and mobile IP
- (vii) Web Services - XML, SOAP, UDDI, WSDL, Platforms for Web Services Development - .NET, J2EE, E-Commerce - Secure Electronic Transactions over the web.

Study materials:

- (i) Data Communications and Networking, Forouzan, 5th ed.
- (ii) TCP/IP Protocol Suite, Forouzan, 4th ed.
- (iii) Online tutorials on Web development.
- (iv) Additional materials to be suggested and/or provided.
- (v) Students are also strongly encouraged to surf the net to find out additional materials on the topics covered.

Evaluation procedure:

- Mid-sem (30%)
- End-Sem (50%)
- Teacher's Assessment (20%)
 - Assignments (10%)
 - Class Test 1/Quiz (5%)
 - Class Test 2/Quiz (5%)

Rules/Regulations:

- (i) Details of the term paper/project to be discussed soon.
- (ii) 80% attendance is compulsory, failing which the student will be deregistered from the course.
- (iii) If absence is due to ill-health or other genuine reason like mess duty, an application to that effect should be submitted with relevant documents on the next day the student attends class. Such requests will not be entertained later.
- (iv) A student will be de-registered anytime if his/her attendance is found to be unsatisfactory. Once a student is de-registered, there will be no revoking of the deregistration decision.