

DESIGN, CONSTRUCTION AND QUALITY CONTROL IN FLEXIBLE PAVEMENTS

Faculty: Dr. A N Arora

Course Duration: 31 Hours

Offered: B. Tech, Semester - VII

The objective of the course is to introduce students to the concepts of characterization and application of sustainable materials in the construction of pavement layers, analysis and design of flexible pavements, design of hot mix asphalt and construction techniques.

Course Outcome

On successful completion of this course, the students should be able to:

- Characterization of pavement materials
- Application of sustainable materials in pavement layers and design of hot mix asphalt (HMA).
- Design flexible pavement as per IRC:37 provisions.
- Highway construction techniques and quality control measures.

Course Content:

Module 1: Characterization of highway materials and use of sustainable materials.

Module 2: Analysis & design of flexible pavements.

Module 3: Highway construction techniques.

Module 4: Hot mix asphalt design and quality control in highway construction.

Evaluation Scheme:

Components	Weightage
Assignment	15
Quiz	15
Mid Term Exam	20
End Term Exam	30
Report	10
Project	10
Total	100

References:

 Bituminous Road Construction in India by Prithvi Singh Kandhal, PHI Learning Pvt. Ltd., 2016.

2. Highway Engineering by S K Khanna, CEG Justo & Veeraragavan, Nem Chand Bros, Roorkee, 2014.

3. Hot Mix Asphalt: Materials, Mixture Design and Construction by Freddy L. Roberts, National Asphalt Pavement Association, Research and Education Foundation, Lanham, Maryland.
4. Specifications for Road and Bridge Works,

Ministry of Surface Transport & Highways, IRC, New Delhi (5th revision) 5. IRC codes



INTEGRATED WATER RESOURCES MANAGEMENT

Faculty: Dr. A N Arora

Course Duration: 30 Hours

Offered to: B. Tech, Semester VII

This course gives a detailed description of various components of hydrological cycle. It also include the various methods of water resources management at micro and macro scale. Various methods of water harvesting is also described in detail.

Course Outcome

On successful completion of this course, the students should be able to: 1. Understand the various components of hydrological cycle. 2. Various form of precipitation 3. Understand the overland, subsurface and channel flow 4. Various uses of water 5. Various methods of water conservation in municipal and agricultural sector

Course Content:

Module 1: Components of Hydrological cycle

•Module 2: Precipitation, Types, measurements

Module 3: Infiltration, Infiltration indices, Factors, measurements of infiltration

Module 4: Groundwater Hydrology, Aquifers, Open wells, Tube wells

Module 5: Water user sectors: municipal, industries and agriculture

Module 6: Water Reuse and water harvesting methods

Evaluation Scheme:

Components	Weightage
Assignment	20
Quiz	20
Theory Exam	40
Project 1	10
Project 2	10
Total	100

References:

- 1.Sharda V.N., Sikka A.K. and Juval G.P. (2006)Participatory Integrated Watershed Management: Α Field Manual, Central Soil and Water Conservation Research and Training Institute. 218. Kaulagarh Road. Dehradun.
- 2.Jain S.K. and Singh V.P. (2006) Water Resources Systems Planning and Management, ReedElsevier India Pvt. Ltd., New Delhi.



SITE INVESTIGATION AND APPLICATION OF GEO-SYNTHETICS

Faculty: Dr. Ravi Ghanti

Course Duration: 30 Hours

Offered to: B. Tech, Semester - VI

This course provides information to the students about the purpose and planning of soil exploration, various exploration techniques, several laboratory and in-situ soil tests, ground water table determination techniques and application of geosynthetics to geotechnical structures.

Course Outcome

On successful completion of this course, the students should be able to:

- Apply appropriate soil exploration technique necessary for site investigation.
- Carry out laboratory and In-situ tests to determine soil properties.
- Classify various types of geosynthetics and would be able to suitably improve the load carrying capacity of geotechnical structures.

Course Content:

Module 1: Importance of site investigation.

Module 2: Planning and designing of site characterization study.

Module 3: Laboratory and In-situ testing.

Module 4: Ground water and seepage detection Report.

Module 5: Types of geosynthetics and their application in geotechnical structures

Evaluation Scheme:

Components	Weightage
Assignment	20
Quiz	20
Theory Exam 2	15
Theory Exam 3	25
Project 1	10
Lab Evaluation 1	10
Total	100

References:

 Jones, J.E.P. (1995). Earth Reinforcement and Soil Structure. Butterworths.
 Koerner, R.M. (1994). Construction and Geotechnical Methods in Foundation Engineering. McGraw-Hill.
 Koerner, R.M. (2002). Design with Geosynthetics. Prentice Hall.
 Moseley, M.P. (1993). Ground Improvement. Chapman and Hall.



VALUE ADDED COURSE

Academic Year-2015-16

Offered by

Department of Computer Science Engineering INSTITUTE OF ENGINEERING AND TECHNOLOGY JK Lakshmipat University

Name of the Course
ANDROID APP DEVELOPMENT

Course Faculty (s) Dr. Gireesh Kumar, Mr. Chandan Verma

Course Code

Course Duration 96 Hrs.

Offered to B.Tech. Computer Science Engineering /Electronics Engineering /Electrical Engineering Students

Course Description

This Android app development course is designed to attain proficiency inmaking android apps for android devices. Students will learn the basics of the android platform.

Course Outcome

- To be able to write simple GUI applications
- To use built-in widgets and components
- Towork with the database to store data locally and on cloud

Course Contents

Module1: Android Overview

- · What is Android? Why Android?
- Introduction to Android Development
- Android Developer Tools
- Setting up your Development Environment
- Android Emulator

Module2: Introducing the Development Framework

- What Comes in the Box
- Understanding the Android Software Stack
- The Dalvik Virtual Machine
- Android Application Architecture
- Android Libraries
- Advanced Android Libraries

Module2: Required Tools

- Eclipse
- Android SDK
- Android Development Tools (ADT)
- Creating Android Virtual Devices (AVDs)
- Anatomy of Android Application

Module3: Fundamental Android UI Design

- Introducing Views
- Creating Activity User Interfaces with Views
- The Android Widget Toolbox
- Introducing Layouts
- Type of Layouts
- · Creating New Views
- Text View
- Button
- Check Box
- Radio Button
- EditText
- Image View
- Toggle Button
- Progress bar
- Scroll View
- Grid View
- List View

Module4: Introducing Intents

- Introduction of Intent
- Type of Intent
- Multiple Activities
- · Passing Data between Activities
- Using Intent Filters to Service Implicit Intents
- Using Intents to Launch Activities
- Using Intents to Broadcast Events

Module5: Introducing SMS

- Using SMS in Your Application
- Sending SMS Messages
- Listening for SMS Messages

Module6: Android Telephony

- Making Phone Calls
- · Monitoring Phone State and Phone Activity

Module7: Media APIs

- Playing Media Resources
- Recording Multimedia

Module8: Bluetooth

- Introducing the Bluetooth Service
- Controlling the Local Bluetooth Device
- · Discovering and Bonding with Bluetooth Devices

Module9: Managing Network and Wi-Fi Connections

- Monitoring and Managing Your Internet Connectivity
- Managing Active Connections
- · Managing Your Wi-Fi

Module9: Google Maps

- Maps View
- Markers
- Changing the Google View
- Android emulator and Google Maps

Course Contents

Module10: Android WebView

- Introduction to Android Web View
- Open Link on Android Device Browser
- Android Web View Example
- Declare Web View Layout
- Load Static Html Data on Web View
- Progress Bar while Loading Web View

Module10: Android Location API

- Determine the current geolocation
- Location Manager
- Location Provider
- Proximity Alert
- Forward and reverse Geocoding Enabled GPS

Evaluation Scheme

Module10: Introducing Adapters

- Introducing
- Using Adapters for Data Binding

Module11: Databases in Android

- Introducing SQLite
- Cursors and Content Values
- Working with Android Databases

Evaluation Scheme		
Sr. No	Specifications	Marks
01	Assignments	20
02	Quiz	20
03	Project-1	30
04	Project-2	30
	Total (100)	100

References

- 1. Android Application Development, Pradeep Kothari, Kogent Learning Solutions Inc. 2014.
- 2. GUI Design for Android Apps, Ryan Cohen, Apress, 2014.
- 3. Android App Development for Dummies, 3ed, Wiley, Michael Burton, 2015



VALUE ADDED COURSE

Academic Year-2015-16

Offered by

Department of Computer Science Engineering INSTITUTE OF ENGINEERING AND TECHNOLOGY

JK Lakshmipat University



Course Faculty (s)
DEVENDRA BHAVSAR

Course Code

Course Duration 45 Hrs.

Offered to Btech CSE

Course Description

Scaling and Connecting Networks covers the architecture, components, and operations of routers and switches in larger and more complex networks. This course also discusses the WAN technologies and network services required by converged applications in a complex network. The course enables students to understand the selection criteria of network devices and WAN technologies to meet network requirements. Students will learn how to configure routers and switches for advanced functionality. The course includes activities using Packet Tracer, hands-on lab work, and a wide array of assessment types and tools.

Course Outcome

On successful completion of this course, the students should be able to:

- 1. Configure and troubleshoot routers and switches.
- 2. Resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks.
- 3. Implement a WLAN in a small-to-medium network.
- 4 Resolve common issues with data link protocols.
- 5. Resolve common issues with OSPF, EIGRP, and STP in both IPv4 and IPv6 networks.
- 6. Implement virtual private network (VPN) operations in a complex networks.

Course Contents

Module 1: LAN Design: Campus Wired LAN Designs, Selecting Network Devices, Scaling VLANs, VTP, Extended VLANs, and DTP, Troubleshoot Multi-VLAN Issues, Layer 3 Switching, STP: Spanning Tree Concepts, Varieties of Spanning Tree Protocols, Spanning Tree Configuration, Link Aggregation Concepts, Link Aggregation Configuration, First Hop Redundancy Protocols.

Module 2: Dynamic Routing Protocol, Distance Vector Dynamic Routing, Link-State Dynamic Routing, EIGRP Characteristics, Implement EIGRP for IPv4, EIGRP Operation Implement EIGRP for IPv6, Troubleshoot EIGRP Single-Area OSPF: OSPF Characteristics, Single-Area OSPFv2 Single-Area OSPFv3.

Module 3: Multiarea OSPF operation, Configuring Multiarea OSPF operation, Advanced Single-Area OSPF Configurations, Troubleshooting Single-Area OSPF Implementations, WAN Concepts, WAN Technologies Overview, Selecting a WAN Technology.

Module 4: Serial Point-to-Point Overview, PPP Operation, Configure PPP, Troubleshooting PPP, Remote Access Connections, PPPoE, VPNs, GRE, BGP, Access Control Lists, Standard ACL Operation and Configuration Review, Extended IPv4 ACLs, IPv6 ACLs, Troubleshoot ACLs

Module 5: Network Security and Monitoring, LAN Security, SNMP, Cisco Switch Port Analyzer (SPAN), Quality of Service, QoS Overview, QoS Mechanisms, Network Evolution, Internet of Things, Cloud and Virtualization, Network Programming and Troubleshooting, Troubleshooting Methodology, Troubleshooting Scenarios.

Prerequis	sites	Introduction to Networks, Switching and Routing
	Evaluation Scheme	
Sr. No	Specifications	Marks
1	Quiz (CISCO Chapter Exams)	40
2	Theory Exam-III (CISCO Final Exam)	40
3	Lab Evaluation-II (CISCO Lab Exam)	20
	Total (100)	100

Evaluation Scheme

References

Text Books:

- 1. Lammle, T. (2016). CCNA Routing and Switching Complete Study Guide: Exam 100-105, Exam 200-105, Exam 200-125. John Wiley & Sons.
- 2. Lammle, T. (2013). CCNA routing and switching study guide: exams 100-101, 200-101, and 200-120. John Wiley & Sons.
- 3. Lammle, T. Cisco Certified Network Associate Study Guide. 2nd. Edition

Reference Books:

- 1. Stallings, W. (2004). Computer networking with Internet protocols and technology. Upper Saddle River, NJ, USA: Pearson/Prentice Hall.
- 2. Kurose, J., & Ross, K. (2010). Computer networks: A top down approach featuring the internet. Peorsoim Addison Wesley.
- 3. Lammle, T. (2011). CCNA Cisco Certified Network Associate Deluxe Study Guide. John Wiley & Sons.



DATA COMMUNICATION & NETWORKS

Faculty: Dr. D Seth Mr. Divanshu Jain

Course Duration: 30 Hours

Offered: 2013-17 B.Tech. ECE 2011-15 B.Tech. ECE

This course is designed to help the students to understand the concepts of data Communications and layered architecture of OSI and TCP/IP Model.

Course Outcome

On successful completion of this course, students should be able to

- 1.Explain fundamental concept of data communication.
- 2.Design, simulate, and analyze the data communication network.
- 3. Explain the different network models and protocols.

Course Content

Module 1

Data communication concepts and techniques in a layered network architecture, communications switching and routing, Different types of communication

Module 2

Network congestion, network topologies, network configuration and management, network model components

Module 3

Layered network models (OSI reference model, TCP/IP networking architecture) and their protocols.

Evaluation Scheme:

Components	Weightage
Class Participation	20
Quiz - 1	35
Quiz - 2	35
Attendance	10
Total	100

1.Stallings, W., "Computer networking with Internet protocols and technology", Upper Saddle River, NJ, USA: Pearson/Prentice Hall, 2004.

2. Kurose, J., & Ross, K., "Computer networks: A top down approach featuring the internet" Peorsoim Addison Wesley, 2010.



HMI AND ELECTRIC DRIVE SYSTEM

Faculty: Mr. H P Agrawal

Course Duration: 30 Hours

Offered: 2012-16 B.Tech. EE; 2013-17 B.Tech. EE

This course is aimed at developing the required understanding the operation, control and application of power conversion systems employing electric drive to cater to industrial needs. It focuses to provide strong foundation to assets performance of different industrial drives considering issues such as, energy efficiency, power quality. economic justification, environmental issues. and practical viabilities. It also focusses role of a visual interface between an individual and the machine using multiple type of HMI. The course will help students to work on live Projects on HMI, Drives and Networking to gain advance knowledge and skills.

Course Outcome

On successful completion of this course, the students should be able to:

- 1.Learn the SCADA system components and its significance.
- 2.Operate mechanism of Energy center based on SCADA and HMI concepts
- 3. Understand the need and importance of monitoring and control
- 4. Analyze the drive based on power electronic devices
- 5.Formulate, design, simulate converters for generic load and for machines.

Course Content

Module I

Introduction to instruments in systems – Switches in automated test systems Instrument System elements – Computer controlled instrument systems.

Module II

PLC and SCADA overview, general features, SCADA architecture, SCADA Remote Terminal Unit (RTU), Human- Machine Interface Units (HMI), Display Monitors/Data Logger Systems, Control systems and Control panels.

Module III

Introduction to self-commutated switches: MOSFET and ICBT, Principle of operation of half and full bridge inverters, Performance parameters, Voltage control of single-phase inverters using various PWM techniques

Module IV

Introduction of various type of drives

Evaluation Scheme:

Components	Weightage
Assignment	20
Class Participation	20
Quiz	30
Lab Evaluation - 1	30
Total	100

- 1. Stuart A. Boyer, "SCADA-Supervisory Control and Data Acquisition", Instrument Society of America Publications, USA,2004.
- 2. Rashid M.H., "Power Electronics Circuits, Devices and Applications", Prentice Hall India, fourth Edition, New Delhi, 2014.
- 3.Ned Mohan, T.M.Undeland and W.P.Robbins, "Power Electronics: converters, Application and design", John Wiley and sons. Wiley India edition, 2006.



Academic Year- 2015-16

COUNSELLING SKILLS FOR MANAGERS

Faculty : Dr. Richa Mishra

Course Duration: 30 hours Offered to: Students of MBA- Sem. II and IV; BBA/ B.Com (H)- Sem. IV

COURSE DESCRIPTION

In the competitive business world, there is a lot of pressure on many of the employees of an organization. The consequent stress and the strain affect their physical and mental health. Thus there is a need that the managers should have the counseling skills. This course aims at developing the professional counseling skills among the students providing an overview of the counseling processes and techniques and developing alternative approach to dealing with problem situations in organizations

COURSE OUTCOME

Upon completion of the course, students will be able to demonstrate:

Knowledge and critical understanding of the historical development and key principles of counseling and the way in which counseling has developed as a discipline;
Successful application in the workplace of the range of knowledge and skills learnt throughout the course.
Ability to apply underlying concepts and principles outside the context in which they were first studied, and the application of those principles in a work context
Ability to initiate and undertake critical analysis of information and propose solutions to problems arising from that analysis in the field of counseling and when working as a managers

COURSE CONTENT

• INTRODUCTION TO COUNSELING-Need for Workplace counseling-Evolution of Counseling over the years -Defining counseling-Distinction between psychotherapy and counseling.

APPROACHES TO COUNSELING-Psychoanalytic approach ,Behavioristic Approach, Humanistic Approach
GOALS OF COUNSELING-Five Major goals of Counseling, Role of counselor, Characteristics of the counselor, The counselor values-Importance of valuing Human Freedom

• THE PROCESS OF COUNSELING- 5-DModel -The phases of counseling

 COUNSELING PROCEDURES- The environment-Intake procedures-Confidentiality and counselor dependability COUNSELING PROCEDURES-The Initial Counseling Interview-Referral Procedure-Guidelines for Effective Counseling-Advanced Counseling Skills • COUNSELING SKILLS-Ways to Invite Counseling Communication and build the Counseling Relationship-Non-Verbal, Verbal Skills, Listening Barriers-Counselor's Qualities, Conditions for counseling • ROLE CONFLICTS IN COUNSELING-The values of

Counseling Vs. Business, Counseling Service, Dilemmas of Manager Counselor

• CHANGING BEHAVIOURS THROUGH COUNSELING

- General Principles of Counseling, Specific Techniques
- ORGANIZATIONAL APPLICATION OF COUNSELING SKILLS
- Change Management, Downsizing, Managing Diversity, Mentoring, Team Management, The learning Organization, Organization Development

• DEALING WITH PROBLEM SUBORDINATES- Identifying Problem Subordinates, Types of Problem Subordinates and dealing with them

• PERFORMANCE MANAGEMENT & ETHICS IN COUNSELLING – Setting Objectives, Support and resources, Career Counseling, Performance Counseling, Ethical Principles.

EVALUATION SCHEME

Component	Weightage
Presentations- Concept paper	40%
Case analysis /Paper Presentation	30%
Quizzes	30%

REFERENCES

 MacLennan, N. (1996). Counselling for managers.
 Gower Publishing Company.
 Nelson-Jones, R. (2008). Introduction to counselling skills: Text and activities. Sage.

3. Casemore, R. (2011). Person-centred Counselling in a Nutshell. Sage.



DIGITAL MEDIA FOR MARKETING

Faculty : Dr. Punam Mishra

Course Duration: 30 hours Offered to: Students of MBA- Sem. I and III; BBA/ B.Com (H)- Sem. III

COURSE DESCRIPTION

The effect of the Internet and related technologies on business and social institutions is more profound than that of any prior invention, including the printing press and the internal combustion engine. Last several years have seen a dramatic increase in the amount of time and money consumers spend online. As a consequence, the Internet has become an important channel that firms can use to reach out and connect to consumers, which has led to the emergence of digital marketing. Digital marketing is an exciting area of marketing practice. In this course, we will cover the what, why, and how of major current approaches, including search engine optimization, search and display ads, email marketing, social media, and online listening/monitoring. This course will cover basic marketing and statistical concepts and provide an introduction to different online marketing tools like email marketing, SEO/SEM and social media marketing. The course will be very hands on in nature, where students will be expected to work with marketing datasets based on instructions in lectures and class discussions.

COURSE OUTCOME

By the end of the course, students should be able to: • Know how to find and use these features of Google Analytics: traffic volume measurement, traffic source tracking, site content measurement, goals, and filters. Use the URL Builder for campaign tracking.

• Advise a company about how to improve their search ranking through search engine optimization (SEO) best practices.

• Recommend keywords for websites and search

ads based on search behavior and competitive analysis. • Create good web-based content. In other words, find a content creation tool that is within your technical capabilities and lets you create something visually appealing, and generate or curate content that will appeal to a specified target audience.

• Gain experience driving traffic to a website, critically evaluating what was effective and what was not, using Google Analytics for website traffic analysis.

• Know the fundamentals of running search ad campaigns and interpreting their results.

• Be fluent in the vocabulary of online display advertising: understand the role of intermediaries between advertisers and publishers, know the different forms of advertising payment (CPM, CPC, CPA), and be able to differentiate the various forms of targeting.

• Understand how the concepts in display advertising apply to online affiliates.

• Know the appropriate metrics to evaluate performance in an email marketing funnel and understand the capabilities of marketing automation tools.

• Write actionable objectives for digital marketing initiatives.

• Develop personal positions about ethical issues in digital marketing activities.

• Know the marketer's legal obligations with respect to social media endorsements, email marketing, and treatment of intellectual property.

COURSE CONTENT

- Marketing in the Digital Era
- E-marketing
- The Online Marketing Mix
- The Online Consumer
- Customer Relationship Management in a Web 2.0 World
- Business Drivers in the Virtual World
- Social Media
- Online Branding

- Traffic Building
- Web Business Models
- E-commerce
- Online Tools for Marketing
- Engagement Marketing through Content Management
- Online Campaign Management
- Consumer Segmentation, Targeting, and Positioning using Online Tools
- Market Influence Analytics in a Digital Ecosystem
- The Contemporary Digital Revolution
- Online Communities and Co-creation
- The World of FacebooK
- The Future of Marketing–Gamification and Apps

EVALUATION SCHEME

Assessment Criteria	Percentage
Continuous Assessment	70%
Class Participation and Attendance	20%
Assignment Report and Presentation	20%
Quizzes and Subject Awareness	30%
Certificate Completion	30%
Grand Total:	100%

REFERENCES

TEXT BOOK:

• Ahuja V. (2015). "Digital marketing"; OUP; 1/ e ADDITIONAL READING MATERIALS:

1. Ryan Damian (2014) "Understanding Digital marketing" Kogan Page 3/e

2. Wertime K. , Fenwick I. (2008) "Digimarketing" Wiley 1/e



Academic Year- 2015-16

FINANCIAL DERIVATIVES AND RISK MANAGEMENT

Faculty : Dr. Lokanath Mishra

Course Duration: 30 hours Offered to: B.Com (H) – Sem. II and IV students

COURSE DESCRIPTION

Financial Derivatives and Risk Management is an elective course for final year MBA students. It is designed is to acquaint students with the principles and practices of risk management using financial derivatives. Topics covered in this course have both theoretical and practical significance because risk management is a central theme of financial management and financial derivatives have become increasingly important in recent decades. An understanding of these concepts is essential for analyzing a wide range of topics.

COURSE OUTCOME

After completion of the course, the student will be able to

- Carry out valuation of financial derivatives
- Describe the key issues concerning mechanics of derivatives markets
- Demonstrate an understanding of principles of risk
- management
- Design risk management strategies using financial derivatives

COURSE CONTENT

- Introduction to financial derivatives
- Forwards and futures markets
- Determination of forward and futures prices
- Risk management structures and policies
- Risk management using forwards and futures
- Options and their payoffs
- Hedging Strategies using Options: Short / Long Hedge, Basis Risk, Hedging Equity Portfolios
- Risk neutral valuation
- Black-Scholes option pricing model
- VaR, Simulation, Volatility smiles

EVALUATION SCHEME

Assessment Criteria	Percentage
Class Participation and Class Attendance	30%
Assignment Report and Presentation	40%
Quizzes and Class Test	30%

REFERENCES

TEXT BOOK:

• John .C. Hull. (2014). Options and Futures. New Delhi: Pearson Publication Ltd.

ADDITIONAL READING MATERIAL:

- Srivastava, Rajiv (2014). Derivatives and Risk Management. 2/e. New Delhi: Oxford University Press
- Sundaram Janakiraman. (2011). Derivatives and Risk
- Management. New Delhi: Pearson Publication Ltd
- Varma, Jayanth R. (2009). Derivatives and Risk

Management. New Delhi: Tata McGraw Hill Education Private Ltd



Academic Year- 2015-16

MANAGEMENT CONSULTING

Faculty : Dr. Upasana Singh

Course Duration: 30 hours Offered to: BBA/ B.Com (H)- Sem. III students

COURSE DESCRIPTION

The consultancy business continues to grow rapidly as almost every organization seeks help in becoming more adaptable in managing change more effectively and in growing and developing from within. The course responds to the increasing need among management consultants for reliable and expert guidance. The course is aimed at satisfying the needs of external consultants and also internal consultants within an organization.

COURSE OUTCOME

After successful completion of the course, the student will:

- Gain knowledge and understanding of many aspects of the management consulting industry and its major practices
- Strengthen one's ability to define key factors relevant to marketing and conducting a successful consulting engagement.
- Improve one's ability to analyze and frame business issues facing a client so as to Interest them in purchasing a project and assure their later commitment to implementation.
- Gain exposure to a variety of intervention approaches essential for assuring change in solving a client's problem.
- Acquire practical skills in certain key areas of consulting.
- Gain practice in performing a field-consulting project.

COURSE CONTENT

• The Changing Consulting Industry- Objectives of the course, Schedule and expectations, Overview of the industry and how it's changing

• **The Consulting Profession:** Types, Skills and Values- Definitions consulting, History and scope of the profession, Form consultant teams for field project

• Marketing and Selling Consulting Services- Marketing methods, Elements of effective proposals, Pricing and fee setting, Negotiation and entry

• **Strategic Marketing Consulting-** Marketing consulting Issues, Types of Marketing Consulting Firms, Future of Marketing Consulting

• Strategy and Organization Consulting- History of strategic organizational planning, Alternative approaches to strategic planning, Alignment and fit issues

• Strategy and Organization Consulting- Development of Organizational Consulting: Design to Transformational Change

• **Discussion of Data Gathering Methods**- Getting started with your client, Different methods of data Gathering, Interviewing issues, Internal consulting

• Analyzing and Framing Problem- What, where and How?, Finalization of Field Project

• Strategy and Operations Management Consulting-Understanding OM consulting issues and requirements: definition & history, Providers of OM services and different contexts for OM consulting, Key elements and concepts of the OM consulting engagement

• **Managing Engagements-** Project management skills, Involving client in the process, Moving from analysis/diagnosis to implementation

• Human Resources Consulting- People issues in the consulting engagement

• **Consulting to CEOs and Boards**- Consulting Services to CEO and BOG, Diversity of Consulting Roles, Consulting to Board: unique Process Issues and Transformation Challenges

• **Consulting Public and Non-Profit Sector**- Unique Public Sector Consulting, Volunteerism in Not-for-Profit Sector, Key Services in Demand, Managing Multiple Stakeholders

• Intervention and Change- Key Dimensions in Consulting Interventions: Delivery and Content Focus, Alternative Intervention Strategies, Implications for Consultants, Clients and the Profession, Collusion between Consultant and Client, Managing Ethical and Practice Challenges

• Individual paper and Team Field Project paper

EVALUATION SCHEME

Component	Weightage
Presentations- Concept paper	40%
Case analysis /Paper Presentation	30%
Quizzes	30%

REFERENCES

1. Greiner, L.E. & Poulfelt, F. (2004). The Contemporary Consultant - Insights from Experts. Mason, USA: Thomson South-Western Publishing.

2. Greiner, L.E., Olson, T.H. & Poulfelt, F. (2004). The Contemporary Consultant - Casebook. Mason, USA: Thomson South-Western Publishing.

Weiss, A. (2009). Getting Started in Consulting,
 3/e. New Delhi: Wiley India.



Academic Year- 2015-16

RURAL MARKETING

Faculty : Dr. Punam Mishra

Course Duration: 30 hours Offered to: Students of BBA- Sem. I, III and V; B.Com (H)- Sem. I and III

COURSE DESCRIPTION

In India the rural economy contributes nearly half of the country's GDP and the size of the rural market in durables and FMCG is bigger than its urban counterpart. In recent times Rural Marketing has emerged as an important internal sub-division within marketing discipline particularly in the context of a large rural economy like India. But questions like "Is there any difference between rural marketing and mainstream marketing?" have not been answered satisfactorily. Through the course, the participants will be introduced to a more holistic perspective of rural marketing which includes not only urban-to-rural marketing, but also touches issues of intra -rural marketing and rural-to-urban marketing. The developmental angle to rural marketing is also addressed.

COURSE OUTCOME

Upon completion of the course, students are expected to be able to:

- Understand conceptual framework of the Rural Marketing with special reference to Indian context.
- Develop analytical and conceptual abilities pertaining to rural marketing decisions to satisfy the rural consumers.
- Understand strategic outlook to capture the rapidly changing profile of rural market.

COURSE CONTENT

• Scope, Significance, Definition, Characteristics and Salient Features of Rural Market.

- Classification of Rural Market. Rural versus Urban Market
- Rural Market Environment
- Rural Marketing Experiences

• Rural Consumer Behavior- Consumer Buying Behavior Models, Factors Affecting Consumer Behavior- Social Factors, Technological Factors, Economic Factors, Political Factors.

• Selecting and Attracting Rural Markets: Segmentation, Targeting & Positioning for Rural Market- Basis and Strategies.

• Rural Strategies: Product Strategy: Rural Product Classification, Assessment of Acceptability, Product Innovation for Rural Markets Branding and Packaging Strategies, Product Life Cycle Strategies.

• Pricing Strategy: Pricing Objectives, Pricing Policythe Affordability Challenge, Pricing for the Qualityconscious Segment, Pricing for the Value-conscious Segment, Pricing for the Price-Conscious Segment, Pricing and Product Life Cycle.

• Distribution Strategy: The Availability Challenge, Distribution Practices and Trends, Rural Logistics, Rural Coverage Decision, Distribution Decision- Direct verses Indirect

• Rural Retailing: Organized Retailing in Rural Markets, Types of Retail Outlets in Rural Areas, Role of Retailers, PPP Models, E-tailing, and Training Retailers.

• Promotion Strategy: Awareness and Motivation Challenge, Objectives and Framework of Promotion Mix, Communication Process and Media, Designing Integrated Marketing Communication Strategy, Rural Advertising

EVALUATION SCHEME

Assessment Criteria	Percentage
Class Participation and Class Attendance	20%
Assignment Report and Presentation	40%
Quizzes and Class Test	40%

REFERENCES

TEXT BOOK:

• Krishnamacharyulu, C.S.G., & Ramakrishnan, L. (2012). Rural Marketing – Text and Cases. New Delhi: Pearson Education.

ADDITIONAL READING MATERIALS:

• Kashyap, P., & Raut, S. (2010). The Rural Marketing Book. New Delhi: Biztantra Publications

• Dogra, B., & Ghuman, K. (2011). Rural Marketing: Concepts & Practices. New Delhi: McGraw-Hill Education.



Academic Year 2015-16

CAD MODELLING

Faculty: Mechanical Engineering

Mechanical Engineering Department is conducting a student's in-house training program on CAD Modelling using AUTOCAD & CREO software for Mechanical Engineering Students.

Course Outcome

After the completion of this course students will be able to

- Understand the concept of engineering drawing.
- Create 2D drafting using AutoCAD
- 3D modelling using CREO 2.0 software.

Module:

 Introduction to CAD/CAM/CAE Software
 AUTOCAD Sketch Commands
 Practice session
 Editing command and Datum Feature
 Array, block, Isometric views, print commands.
 Creo Introduction, sketcher.
 Basic 3D commands.
 Editing commands Advance 3D commands.
 Practice session and valediction

Evaluation Scheme:

Components	Weightage
Practice Session - I	25
Practice Session - II	25
Practice Session - III	25
Practice Session - IV	25
Total	100



PROGRAMMING FOR CNC LATHE

Faculty: Mechanical Engineering

It is a student's training program "Programming for CNC Lathe" in our CNC Lab from 21st to 25th Sep 2015. During the training program students will learn how to write a CNC program and also get hands-on experience.

Course Outcome

After the completion of this course students will be able to

- Understand the concept of CNC machining.
- Understand the concept of G Codes and M Codes.
- Write a CAM programing for CNC Lathe.

Course Content:

Day 1

Introduction to CNC programing, briefing of G codes and M codes with its uses, how to write manual CNC programing for plain turning and hands-on experience

Day 2

How to write manual CNC programing for step turning, taper turning , etc and handson experience.

Day 3

Thread cutting and undercut programing on lathe.

Day 4

Job preparation

Day 5

Job preparation and evaluation.

Evaluation Scheme:

Components	Weightage
Practice session-Day 1	20
Practice session-Day 2	20
Practice session-Day 3	20
Practice session-Day 4	20
Practice session-Day 5	20
Total	100

References:

 Mastering CAD/CAM, Ibrahim Zeid, McGraw Hill Education; 2nd edition (7 August 2006).
 2.CAD/CAM Paperback, M. Groover, Pearson, Kindle Edition, 2003.