

# ವಿಶ್ವೇಶ್ವರಯ್ಯ ತಾಂತ್ರಿಕ ವಿಶ್ವವಿದ್ಯಾಲಯ

ವಿಟಿಯುಅಧಿನಿಯಮ೧೯೯೪ರಅಡಿಯಲ್ಲಿಕರ್ನಾಟಕಸರ್ಕಾರದಿಂದಸ್ಥಾಪಿತವಾದರಾಜ್ಯವಿಶ್ವವಿದ್ಯಾಲಯ

## VISVESVARAYA TECHNOLOGICAL UNIVERSITY

State University of Government of Karnataka Established as per the VTU Act, 1994"InanaSangama" Belagavi-590018, Karnataka, India

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REGISTRAR

REF: VTU/BGM/BoS/MArchCPM/2023-24/5827

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#### CIRCULAR

Subject:

22CPM31 Project Resource Management -2 syllabus updated regarding...

Reference: Chairperson BoS in Arch mail dated; 19.01.2024

This is a reference to the subject discussed above. The M.Arch in Construction Project Management program's subject/course "22CPM31-Project Resource Management-2" has had its curriculum modified by the Board of Studies in Architecture. A copy of the curriculum is attached to this circular for the information of all stakeholders.

We hereby notify all concerned faculty members and students to take note of the same.

Sd/-

REGISTRAR

To,

All directors, principals, and heads of the Department of School of Architecture under the ambit of the university.

Copy to,

- The Hon'ble Vice Chancellor through the secretary to the VC for information.
- The Registrar(evaluation) for information and needful
- The Special Officer, QPDS section, VTU Belagavi for information and needful
- The Director, ITI SMU VTU Belagavi to upload the circular on the VTU web portal
- The Special Officer, Academic Section, VTU Belagavi for information and needful
- Office Copy

REGISTRAR

#### **III Semester**

	PROJECT RESOURCE MANAGEMENT - 2				
Course Code	22CPM31	CIE Marks	50		
Teaching Hours/Week (L:P:SDA)	02:0:02	SEE Marks	50		
Total Hours of Pedagogy	32+32(SDA)	Total Marks	100		
Credits	4	Exam Hours	3 Hrs		

## **Course Learning objectives:**

 Planning and procurement of various resources required in a project in an effective and efficient manner. Understanding the laws and regulation concerning with labours.

#### Module-1

#### RESOURCE PLANNING

Resource Planning, Procurement, Identification, Personnel, Planning for material, Labour, time schedule and cost control, Types of resources, manpower, Equipment, Material, Money, Time

Teaching-
Learning
<b>Process</b>

Direct method: Lecture supported by conventional method of Blackboard and chalk to understand human resource and management of human resources. , Discussions, Debate, Industry interactions, and research paper/news paper reading and inferences from the same.

#### Module-2

## TIME AND COST MANAGEMENT

Personnel time, Management and planning, managing time on the project, forecasting the future, Critical path measuring the changes and their effects - Cash flow and cost control

Teaching-	
Learning	
Process	

**Collaborative and Cooperative learning**: Students should work on case studies in a group to understand the management of personnel, productivity and the role of project manager.

## Module-3

## LABOUR MANAGEMENT

Systems approach, Characteristics of resources, Utilization, measurement of actual resources required, Tools for measurement of resources, Labour, Classes of Labour, Cost of Labour, Labour schedule, optimum use Labour.

Teaching-
Learning
Process

ICT and digital support:

Power point presentation to understand the existing labour laws.

## Module-4

## INDUSTRIAL RELATIONS AND LABOUR LAWS

Labour legislation – nature and scope – Indian constitution and labour – labour laws for the building Industry – laws regulating wages and payments to workers – social security laws – industrial relations laws – miscellaneous laws- Industrial relations and trade unions.

Teaching-	
Learning	
Process	

**Collaborative and Cooperative learning**: knowledge sharing through seminars and case studies.

Module-5

#### SITE ORGANIZATION

Types of site Organization – Functional, Divisional and matrix organization – Organization chart –Execution and monitoring. Mobilization of materials and equipment on site management- Work completion and finalization – completion of work and closing of site – Preparation of final bill – Reconciliation of materials – Plant and equipment utilization statement – List of defects –Demobilization of resources – Settlement of claim – Extension of time – Guidelines for site management.

Teaching-	
Learning	
Process	

**ICT and digital support**: power point presentations to elaborate the site organisation, execution and monitoring.

**Collaborative and Cooperative learning:** case studies and site visits to understand the site organisation in real time projects.

## Assessment Details (both CIE and SEE):

The weightage of Continuous Internal Evaluation (CIE) is 50% and for Semester End Exam (SEE) is 50%. The minimum passing mark for the CIE is 50% of the maximum marks. Minimum passing marks in SEE is 40% of the maximum marks of SEE. A student shall be deemed to have satisfied the academic requirements and earned the credits allotted to each subject/ course if the student secures not less than 50% in the sum total of the CIE (Continuous Internal Evaluation) and SEE (Semester End Examination) taken together.

#### **Continuous Internal Evaluation:**

Three Unit Tests each of 20 Marks (duration 01 hour 30 min)

- 1. First test at the end of 5th week of the semester
- 2. Second test at the end of the 10th week of the semester
- 3. Third test at the end of the 13th week of the semester

Two assignments each of 10 Marks

- 4. First assignment at the end of 4th week of the semester
- 5. Second assignment at the end of 9th week of the semester

Group discussion/Seminar/quiz any one of three suitably planned to attain the COs and POs for 20 Marks(duration 01 hours)

6. At the end of the 13th week of the semester

The sum of three tests, two assignments, and quiz/seminar/group discussion will be out of 100 marks and will be scaled down to 50 marks

#### **Semester End Examination:**

Theory SEE will be conducted by University as per the scheduled timetable, with common question papers for the subject (duration 03 hours)

- 1. The question paper will have ten questions. Each question is set for 20 marks.
- 2. There will be 2 questions from each module. Each of the two questions under a module (with a maximum of 3 sub-questions), should have a mix of topics under that module.

The students have to answer 5 full modules, selecting one full question from each module. Marks scored by the student will be scale downed to 50 Marks

## **Suggested Learning Resources:**

## Books

- 1. Carleton Counter II and Jill Justice Coutler, The Complete Standard Handbook of construction
- 2. Personnel Management, Prentice Hall, Inc., New Jersey, 1989.
- 3. Memoria, C.B., Personnel Management, Himalaya Publishing Co., 1992.
- 4. Josy. J. Familaro, Handbook of Human Resources Administration, McGraw Hill International Edition, 1987.
- 5. Pringle Charles, Management Longenecker Emerricle Publishing Company, 1981.
- 6. R.S. Dwivedi, Human Relations and Organizational Behaviour, BH 1987.
- 7. Austen A D & Neale R H, Managing construction projects, Dialogue publication, 1985

## Web links and Video Lectures (e-Resources):

• Resource Management: Process, Tools & Techniques (projectmanager.com)

## **Skill Development Activities Suggested**

- Resource management (leveling) to be explored using software.
- Creating an organization breakdown structure to execute a project.

## Course outcome (Course Skill Set):

At the end of the course the student will be able to:

Sl. No.	Description	Blooms Level	
CO1	Illustrate the development, implementation, and evaluation of various resources of a construction project.	L3	
CO2	Analyze the design and evaluation of time management program.	L4	
CO3	Analyze the design and evaluation of labour management program.	L3	
CO4	Interpret the rational design of compensation and labour laws.	L5	
CO5	Develop the design and evaluation of the site organization and planning.	L3	

## **Program Outcome of this course:**

Sl. No.	Description				
1	Acquire outstanding fundamental knowledge in the field of Construction Project Management.				
2	Encompass the ability to work in collaboration with interdisciplinary teams.	PO2			
3	Demonstrate creativity in the problem-solving process through professional quality graphic presentations and technical drawings.				
4	Acquire outstanding knowledge & software skills for design, construction, resources management and scheduling & Monitoring of projects.				
5	Understanding the diverse needs of values and systems of society and providing sustainable solutions				
6	Demonstrate design solutions that integrate contextual, social, economic, cultural, ethical, environmental concerns.				
7	Ability to do independent/option-based research and exploration of advanced and emerging topics.	P07			
8	Appraise professional standards and ethical responsibilities as a team member.	P08			

## Mapping of COs and POs:

	P01	PO2	PO3	P04	PO5	P06	P07	P08
CO1	M	Н	Н	М	L	0	0	Н
CO2	Н	L	M	L	L	L	М	Н
CO3	Н	Н	0	Н	M	Н	M	Н
CO4	Н	Н	0	Н	L	L	M	Н
CO5	Н	Н	Н	М	М	Н	M	Н