	Karnatak Law Society's	
	VishwanathraoDeshpande Institute of Technology,Haliyal-581 329	
	Doc. No.: VDIT/ACAD/AR/08	Rev.No.:01
	Page 1 of 1	Rev. Dt: 01/08/2020
ADD-ON COURSE		

AY: 2020-21

Department: Civil Engineering
Semester: III

Add-on Course Title: Advance Geodetic surveying

Course Contents (30 or more hours) :

Theory: 30

Course delivery plan:

Blackboard/PPT

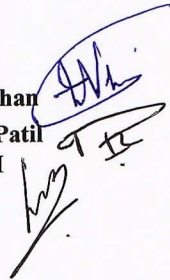
Evaluation:


Written Test: 50 marks

To be reduced to marks out of 5

Evaluators

Prof. Harshvardhan
Prof. Rakesh J. Patil
Prof. Laxmi G H





HEAD
Dept. of Civil Engg.
KLS V.D.I.T., Haliyal

Add on course syllabus

Sub: Advance Geodetic surveying

Sl. No.	Syllabus details	No. of hours		BTL
		Theory	Lab	
1	INTRODUCTION TO ADVANCE SURVEYING Level line – Horizontal line – Datum – Bench marks - Levels and staves – temporary and permanent adjustments – Methods of leveling.	10	NIL	L2, L3
2	INTRODUCTION COUNTERING Longitudinal and Cross-section-Plotting – Contouring – Methods – Characteristics and uses of contours – Plotting – Methods of interpolating contours The Planimeter – Areas enclosed by straight lines – Irregular figures – Volumes – Earthwork calculations – Capacity of reservoirs – Mass haul diagrams.	10	NIL	L2, L3
3	CONTROL SURVEYING Horizontal and vertical control- Methods-specifications – Triangulation- Base line – Instruments and accessories – Corrections – Satellite station – Reduction to centre – Trigonometric levelling- Single and reciprocal observations – Traversing – Gale's table.	10	NIL	L2, L3
Total hours		30		

Reference books:

1. Howard S. Peavy, Donald R. Rowe, George T , Environmental Engineering - McGraw Hill International Edition. New York,2000
2. S. K. Garg, Environmental Engineering vol-I, Water supply Engineering – M/s Khanna Publishers, New Delhi2010
3. B.C. Punmia and Ashok Jain, Environmental Engineering I-Water Supply Engineering, Laxmi Publications (P)Ltd., New Delhi2010




HEAD
Dept. of Civil Engg.
KLS V.D.I.T., Haliyal



KARNATAK LAW SOCIETY'S

Vishwanathrao Deshpande Institute of Technology, Haliyal-581 329

Doc. No.: VDIT/ACAD/CP/01a

Rev.No.:03

Page 1 of 1

Rev. Dt: 25/03/2021

COURSE PLAN

Semester: V

Year: 2020-21 (Odd)

Course Title	Flexible pavement design using traffic survey and HRB soil classification.	Course Code	ADD ON
Total Teaching Hours	-	Teaching hours/week	-
CIA: 30		Prerequisites	Highway Engineering
Course Plan prepared by	Prof. Harsha A. Jadhav	Approved by	

Course Outcomes

CO1: The students will be able to understand basic concepts of Pavement Design.

CO2: The students will be able to acquire practical knowledge of pavement design.

CO3: The students will be aware importance of soil in pavement design.

CO's And PO's Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1				2										
2					2									
3									2	2				

Text/Reference Books

T1: S K Khanna and C E G Justo, "Highway Engineering", Nem Chand Bros, Roorkee.

T2: L R Kadiyali, "Highway Engineering", Khanna Publishers, New Delhi.

R1: Relevant IRC Codes

R2: Specifications for Roads and Bridges-MoR T&H, IRC, New Delhi.

Syllabus for the Internal Assessment Tests

All the modules 1,2,3

Test pattern: Questions will be set according to above syllabus and students should write 30 for Marks in 1 Hour 15 min., and will be converted to out of 30 Marks and all IA's are compulsory.




HEAD
Dept. of Civil Engg.
KLS V.D.I.T., Haliyal



Karnatak Law Society's

VishwanathraoDeshpande Institute of Technology,Haliyal-581 329

Doc. No.: VDIT/ACAD/AR/08

Rev.No.:01

Page 1 of 1

Rev. Dt: 01/08/2020

ADD-ON COURSE

Add on course syllabus

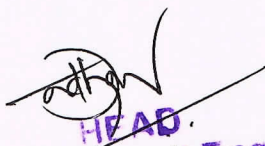
Sub: Flexible pavement design using traffic survey and HRB soil classification

Sl. No.	Syllabus details	No. of hours Theory/Lab		BTL
1	Learn how to evaluate site and soil condition :Selection of site, introduction study on subgrade material, Concept of HRB soil classification, Conducting laboratory tests for soil type identification, Concept of Hydrometer method (Wet sieve analysis), CBR test method, Laboratory test on CBR method, Laboratory test on CBR method, Graphical method of CBR calculation.	10		L1
2	Learn how to evaluate traffic condition and determine the Design index: Introduction to traffic engineering, Concept of Passenger car unit, Concept of traffic volume count survey, Concept of classified traffic volume count survey and its importance, Field traffic volume count survey, Determining the traffic design index.	10		L1, L2
3	Learn how to select the pavement materials: Introduction to pavement, Selection of pavement materials using IRC chart, Study on importance of IRC values, Types of flexible pavement design, Comparison on one over the other pavement design type, Concept of Cumulative standard axle, Concept of VDF and LDF and its importance, Pavement design using CSA- Method using traffic data and soil classification, Cross-section of pavement in Auto Cad, Importance of CSA method in field.	10		L1, L2, L3
Total hour:		30		

Text Books/Reference books:

1. S K Khanna and C E G Justo, "Highway Engineering" , Nem Chand Bros, Roorkee.
2. L R Kadiyali, "Highway Engineering" , Khanna Publishers, New Delhi.
3. Relevant IRC Codes
4. Specifications for Roads and Bridges-MoR T&H, IRC, New Delhi.




HEAD.
Dept. of Civil Engg.
KLS V.D.I.T., Haliyal

WETLAND MANAGEMENT

Course objectives: To provide an understanding of:

- Improved knowledge on urban lake management – the concepts, tools and techniques.
- Develop skills in mapping of lake and its catchment.
- Understanding of lakes as a source of urban water supply and groundwater recharge.
- Update on existing and upcoming policies/guidelines/reforms on urban lake management and the way forward
- Knowledge of best management practices and successfully implemented case examples of wetlands management.

Module -1
Introduction to wetlands/ lakes in urban context; associated management and environmental issues including lacking policy and regulation interlinks; Importance of integrated lake-basin management. [L1]
Module -2
Role of wetlands in the overall hydrological cycle and local ecosystem, different functions and uses of wetlands: groundwater recharge, water quality control and pollution abatement, climate resilience including flood control and, maintenance of biodiversity and livelihood. [L1,L2]
Module -3
Catchment identifying opportunities for urban wetlands management, pollution abatement through sewage or contaminated runoff for urban wetlands through constructed wetlands. [L1,L2]

Course outcomes: On completion of this course, students are able to:

- Exposure to wetlands management concepts.
- Enhanced skills for planning and designing of water sensitive systems.
- Improved knowledge on cost-benefit analysis of urban wetlands system.
- Acquaintance with policies and management strategies of wetlands.
- Understand the impacts of pollution on urban water systems and benefits of wetlands preservation in pollution abatement.
- Recognize how community could rejuvenate water bodies in their area.

Reference Books:

1. Barry R.G., and Chorley R.L., “Atmosphere, Weather and Climate”, 4th Edition, ELBS Publication.
2. Bolin B., “Carbon Cycle Modelling”, John Wiley and Sons Publications.
3. Corell R.W., and Anderson P.A., “Global Environmental Change”, Springer Verlog Publishers.



Handwritten signature
HEAD
 Dept. of Civil Engg.
 KLS V.D.I.T., Haliyal



**KARNATAK LAW SOCIETY'S
Vishwanathrao Deshpande Institute of Technology, Haliyal-581 329**

Doc. No.: VDIT/ACAD/CP/01a

Rev.No.:03

Page 1 of 1

Rev. Dt: 25/03/2021

COURSE PLAN

Semester: VII

Year: 2020-21 (Odd/Even)

Course Title	Wetland Management	Course Code	ADDON
Total Teaching Hours	30	Teaching hours/week	02
CIA: 10		Prerequisites	Wetland Management
Course Plan prepared by	Prof. Seema R Basarikatti	Approved by	Prof. Shreedhar C. K
Course Outcomes			
CO1: Improved knowledge on urban lake management – the concepts, tools and techniques.			
CO2: Develop skills in mapping of lake and its catchment.			
CO3: Understanding of lakes as a source of urban water supply and groundwater recharge.			
CO4: Update on existing and upcoming policies/guidelines/reforms on urban lake management and the way forward			

CO's And PO's Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1	3			3	3									
2	3			3	3									
3	3			3	3									
4	3			3	3									
5	3			3	3									

Text /Reference Books

T1: Barry R.G., and Chorley R.L., "Atmosphere, Weather and Climate", 4th Edition, ELBS Publication.
T2: Bolin B., "Carbon Cycle Modeling", John Wiley and Sons Publications.
T3: Corell R.W., and Anderson P.A., "Global Environmental Change", Springer Verlog Publishers.

Module Wise Text /Reference Books


Module 1: T1	Module 2: T2	Module 3: T3
--------------	--------------	--------------

Syllabus for the Internal Assessment Tests (Tentative)

Test pattern	Questions will be set according to above syllabus and students should write test through online mode.
--------------	---



HEAD
Dept. of Civil Engg.
KLS V.D.I.T., Haliyal

	Karnatak Law Society's		
	Vishwanathrao Deshpande Institute of Technology, Haliyal - 581 329		
	Doc. No.: VDI/ACAD/AR/08	Rev.No.:01	
	Page 1 of 1	Rev. Dt: 01/08/2020	
ADD-ON COURSE			

Add on course syllabus


Sub: Advanced Concrete Technology

Sl. No.	Syllabus details	No. of hours		BTL
		Theory	Lab	
1	Importance of Bogue's compounds, Structure of hydrated cement paste, transition zone, factors affecting strength and porosity of concrete, Rheology of concrete in terms of Bingham's parameter	10		L1,L2
2	Durability of Concrete: Introduction, Permeability of concrete, chemical attack, acid attack, corrosion in concrete, Thermal conductivity, thermal diffusivity, specific heat, Alkali aggregate reaction, IS 456-2000 requirement for durability. Experimental demo of durability tests.	10		L1,L2
3	Methods of concreting- Pumping, Underwater concreting Special concrete: Shotcrete, High volume fly ash concrete: concept, properties, typical mix, Ferro cement: materials, techniques of manufacture, properties and application	10		L1,L2
Total hours		30		

Reference books:

1. Neville A.M. "Properties of Concrete"-4th Ed., Longman.
2. M.S. Shetty, Concrete Technology - Theory and Practice Published by S. Chand and Company, New Delhi.
3. Kumar Mehta. P and Paulo J.M. Monteiro "Concrete-Microstructure, Property and Materials", 4th Edition, McGraw Hill Education, 2014
4. A.R. Santha Kumar, "Concrete Technology", Oxford University Press, New Delhi (New Edition).




HEAD
Dept. of Civil Engg.
KLS V.D.I.T., Haliyal



Karnatak Law Society's
Vishwanathrao Deshpande Institute of Technology, Haliyal - 581 329

Doc. No.: VDIT/ACAD/AR/08

Rev.No.:01

Page 1 of 1

Rev. Dt: 01/08/2020

ADD-ON COURSE

Department: Civil Engineering
Semester: IV

AY : 2020-21

Add-on Course Title: Advanced Concrete Technology

Course Contents (30 or more hours) :

Theory: 30 hours

Lab:

Course delivery plan:

Theory / Lab Slots are given in the time table

Evaluation:

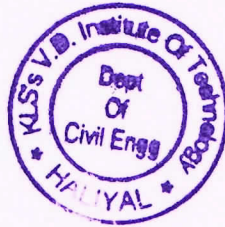
Written Test/Lab:

30 marks

To be reduced to marks out of 5

Boni

Evaluators



[Signature]
HoD

HEAD
Dept. of Civil Engg.
KLS V.D.I.T., Haliyal



[Faint text]



KARNATAK LAW SOCIETY'S

Vishwanathrao Deshpande Institute of Technology, Haliyal-581 329

Doc. No.: VDIT/ACAD/CP/01a

Rev.No.:03

Page 1 of 1

Rev. Dt: 25/03/2021

COURSE PLAN

Semester: IV

Year: 2020-21 (Odd/Even)

Course Title	Advanced Concrete Technology	Course Code	-
Total Teaching Hours	30	Teaching hours/week	03
CIA: 05	SEE:-	Prerequisites	Concrete Technology
Course Plan prepared by	Prof. Parvati Oni	Approved by	
Course Outcomes			
CO1: To study the microscopic structure of concrete.			
CO2: To study the durability aspect of concrete.			
CO3: To understand the special concreting methods/techniques.			

CO's And PO's Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1	H													
2	H													
3					M									

Text /Reference Books

Text Books:

T1.Neville A.M. "Properties of Concrete"-4th Ed., Longman.

T2. M.S. Shetty, Concrete Technology - Theory and Practice Published by S. Chand and Company, New Delhi.

T3. Kumar Mehta. P and Paulo J.M. Monteiro "Concrete-Microstructure, Property and Materials", 4th Edition, McGraw Hill Education, 2014

T4. A.R. Santha Kumar, "Concrete Technology", Oxford University Press, New Delhi (NewEdition).

Reference Books:

R1. M L Gambir, "Concrete Technology", McGraw Hill Education, 2014.

R2. N. V. Nayak, A. K. Jain Handbook on Advanced Concrete Technology, ISBN: 978-81-8487-186-9

R3. Job Thomas, "Concrete Technology", CENGAGE Learning, 2015.

R4. IS 4926 (2003): Code of Practice Ready-Mixed Concrete [CED 2: Cement and Concrete] Criteria for RMC Production Control, Basic Level Certification for Production Control of Ready Mixed Concrete- BMTPC.

R5. Specification and Guidelines for Self-Compacting Concrete, EFNARC, Association House.

Module Wise Text /Reference Books

Module 1: T1, R1


Module 2: T1, R1

Module 3: T1, R1

Syllabus for the Internal Assessment Tests (Tentative)

All the modules ie. M1,M2,M3	
Test pattern	Questions will be set according to above syllabus and students should write for 50 Marks in 1 Hour 15 min., and will be converted to out of 05 Marks.

b
BoniHEAD
Dept. of Civil Engg.
KLS V.D.I.T., Haliyal

	Karnatak Law Society's	
	Vishwanathrao Deshpande Institute of Technology, Haliyal - 581 329	
	Doc. No.: VDIT/ACAD/AR/08	Rev.No.:01
	Page 1 of 1	Rev. Dt: 01/08/2020
ADD-ON COURSE		

Add on course syllabus

AY: 2020-21 (Even)

Department: Civil Engineering
Semester: 6th

Add-on Course Title: Advanced Construction Practice

Course Contents: Theory (30 hours duration)

Course delivery plan:

Theory Slots given in the time table

Evaluation:

Written Test: Assignment

Quiz

30 marks


Class Test

} To be reduced to marks out of 5

Sl. No	Syllabus details	No. of hours: 10Hrs/Module Theory/Lab	BTL
1	Sustainable Concrete Construction techniques; Changing Trend in RMC Usage; Advances in Concrete; Structural Health Monitoring using Nano Composites; 3D Building Technology; Value added Concretes for Challenging Constructions. Site visit to RMC plant and Tarihal Industrial area.	Theory	L2
2	Achieving Sustainability in Concrete Construction using Industrial waste, Plastic Aggregates, E- waste; Quality Control in Construction of Buildings, Mass Concreting in Massive Construction using advanced techniques; Talk by Industrial expert.	Theory	L2
3	Innovation Techniques for Modern Marine Structures; How blended cement make Structure durable; Building Information Modelling (BIM) in Civil Engineering Application; Latest trends in Water Proofing; Talk by Alumni.	Theory	L2
	Total hours	30	

Reference books:

1. Roger Greena , R Chudley, Mike Hurst, Simon Topliss "Advanced Construction Technology" 5th edition, Heinemann; (26 November 2012)
2. Stephen Emmitt "Barry's Advanced Construction of Buildings", 4th Edition, Wiley-Blackwell, ISBN: 9781118977101, November 2018
3. Roy Chudley Mciob and Roger Greeno "Advanced Construction Technology" 4th Edition, Pearson, July 2017


Staff
Prof.Vijaylaxmi V




HEAD
Dept. of Civil Engg.
KLS V.D.I.T., Haliyal



KARNATAK LAW SOCIETY'S

Vishwanathrao Deshpande Institute of Technology, Haliyal-581 329

Doc. No.: VDIT/ACAD/CP/01a

Rev.No.:03

Page 1 of 1

Rev. Dt: 25/03/2021

COURSE PLAN

Semester: VI

Year: 2020-21 (Even)

Course Title	ADVANCED CONSTRUCTION PRACTISE	Course Code	ADD - ON
Total Teaching Hours	30	Teaching hours/week	02
CIA: 00	SEE:00	Prerequisites	Building Material and Construction
Course Plan prepared by	Prof. Vijaylaxmi V	Approved by	Prof. Harsha J
Course Outcomes			
CO1: To Understand the basic concepts of building materials			
CO2: To understand the use of building material and modern method of construction in the site			
CO3: To understand the concept of building Modeling software			

CO's And PO's Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1	3						3							
2	3					3	3							
3	3				3									

Text /Reference Books

T1: Roger Greena , R Chudley, Mike Hurst, Simon Topliss "Advanced Construction Technology" 5th edition, Heinemann; (26 November 2012)

T2: Stephen Emmitt "Barry's Advanced Construction of Buildings", 4th Edition, Wiley-Blackwell, ISBN: 9781118977101, November 2018

T3: Roy Chudley Mciob and Roger Greeno "Advanced Construction Technology" 4th Edition, Pearson, July 2017

Module Wise Text /Reference Books

Module 1: T1, T2	Module 2: T2, T3	Module 3: T1, T2, T3		
------------------	------------------	----------------------	--	--

Syllabus for the Internal Assessment Tests (Tentative)

Test pattern	Questions will be set according to above syllabus and students should write for 50 Marks in 1 Hour 15 min., and will be converted to out of 5 Marks. Questions will be of descriptive type.
--------------	---



~~JK~~
HEAD
Dept. of Civil Engg.
KLS V.D.I.T., Haliyal

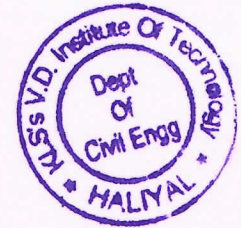


Karnataka Law Society's

Vishwanathrao Deshpande Institute of Technology, Haliyal

B. E. CIVIL ENGINEERING ADDON COURSE SYLLABUS	
ADDON COURSE	MATHEMATICAL THINKING, LOGICAL REASONING & PROFESSIONAL ETHICS
SEMESTER	VIII
FACULTY HANDLING	Prof. HARSHAVARDHAN V S
DURATION	30 HOURS
Module-1: Development of Professional Values, Attitudes and Ethics	
Morals, values and Ethics, Integrity – Work ethic, Service learning – Civic virtue – Respect for others – Living peacefully – Caring – Sharing – Honesty – Courage – valuing time – Cooperation – Commitment – Empathy – Self-confidence – Character – Spirituality – Introduction to Yoga and meditation for professional excellence and stress management.	10 Hours
Module-2: Mathematical Thinking and Logical Reasoning	
Data Interpretation, Critical reasoning, Numerical Reasoning, Numerical Estimation, Numerical Computation.	10 Hours
Module-3: Verbal Ability	
English Grammar, Vocabulary, Analogies, Verbal and Critical Reasoning	10 Hours

This Course will be of help to students when they appear for competitive exams for government jobs and higher studies in India and Abroad. This course will also help students with Development of Professional Values, Attitudes and Ethics



Resource Person

1. M Narayan, Smart City Head, Hubli-Dharwad
2. Arpita Naik M Sc. University of New South Wales, Australia


Staff in charge (HARSHAVARDHAN V.S)


HOD
HEAD
Dept. of Civil Engg.
KLS V.D.I.T., Haliyal



KARNATAK LAW SOCIETY'S

Vishwanathrao Deshpande Institute of Technology, Haliyal-581 329

Doc. No.: VDIT/ACAD/CP/01a

Rev.No.:03

Page 1 of 1

Rev. Dt: 25/03/2021

COURSE PLAN

Semester: VIII

Year: 2020-21 (Even)

Course Title	Mathematical thinking, Verbal ability & Professional ethics	Course Code	ADD - ON
Total Teaching Hours	30	Teaching hours/week	04
CIA: 40	SEE:60	Prerequisites	Basic Surveying
Course Plan prepared by	Prof. Harshavardhan V S	Approved by	
Course Outcomes			
CO1: Understand the basic concepts of mathematical ability.			
CO2: Acquire satisfactory competency in use of verbal ability.			
CO3: To create an awareness on Engineering Ethics and Human Values.			

CO's And PO's Mapping Matrix

CO	PO1	PO2	PO3	PO4	PO5	PO6	PO7	PO8	PO9	PO10	PO11	PO12	PSO1	PSO2
1	3													
2										3				
3								3						
Text /Reference Books														
T1. ABHIJIT GUHA and R.S. Aggarwal, Quantitative Aptitude for Competitive Examinations														
T2. R.S. Aggarwal, A Modern Approach to Verbal & Non-Verbal Reasoning														
T3 GKP, GATE 2021 - Guide - General Aptitude.														
T4. R. Subramanian, Professional Ethics: Need for the 21st Century														
Module Wise Text /Reference Books														
Module 1: T1, T3,			Module 2: T2,T3			Module 3: T4								

Syllabus for the Internal Assessment Tests (Tentative)

Test pattern	Questions will be set according to above syllabus and students should write for 50 Marks in 1 Hour 15 min., and will be converted to out of 5 Marks. Questions will be of objective type.
--------------	---


HEAD
Dept. of Civil Engg.
KLS V.D.I.T., Haliyal

