

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM**  
**CHOICE BASED CREDIT SYSTEM (CBCS)**  
**SCHEME OF TEACHING AND EXAMINATION 2015-2016**

**I SEMESTER B.E./B.TECH.****PHYSICS GROUP**

Sl. No.	Subject Code	Subject		Teaching Department	Board	Theory /Lab/ Drawing (Hrs/ Week)	Examination Marks			Credits
							Th./Pr.	I.A.	Total	
1	15MAT11	Engineering Maths-I	BS	Maths	Basic Sc.	4 (T)	80	20	100	4
2	15PHY12	Engineering Physics	BS	Physics	Basic Sc.	4 (T)	80	20	100	4
3	15CIV13	Elements of Civil Engg. & Mechanics	ES	Civil Engg.	Civil Engg.	4 (T)	80	20	100	4
4	15EME14	Elements of Mechanical Engg.	ES	Mech. Engg.	Mech. Engg.	4 (T)	80	20	100	4
5	15ELE15	Basic Electrical Engg.	ES	E & E	E & E	4 (T)	80	20	100	4
6	15WSL16	Workshop Practice	ES	Mech., Auto, IP, IEM, Mfg. Engg.	Mech. Engg.	3(2 hrs lab+ 1 hr instruction )	80	20	100	2
7	15PHYL17	Engg. Physics Lab	BS	Physics	Basic Sc.	3(2 hrs lab+ 1 hr instruction)	80	20	100	2
8	15CPH18	Constitution of India, Professional Ethics and Human Rights (CPH)	MNC	Humanities		2 (Tutorial)	40	10	50	--
9		Language (Kan.)	Mandatory Learning	Humanities		1 (T)	-	-	-	--
						29	600	150	750	24

Note: The Subjects Kannada and English are Audit Courses

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM**  
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**SCHEME OF TEACHING AND EXAMINATION 2015-2016**

**II SEMESTER B.E./B.TECH.**

Sl. No.	Subject Code	Subject		Teaching Department	Board	Theory /Lab/ Drawing (Hrs/ Week)	PHYSICS GROUP Examination Marks			Credits
							Th./Pr.	I.A.	Total	
							1	15MAT21	Engineering Maths-II	
2	15PHY22	Engineering Physics	BS	Physics	Basic Sc.	4 (T)	80	20	100	4
3	15CIV23	Elements of Civil Engg. & Mechanics	ES	Civil Engg.	Civil Engg.	4 (T)	80	20	100	4
4	15EME24	Elements of Mechanical Engg.	ES	Mech. Engg.	Mech. Engg.	4 (T)	80	20	100	4
5	15ELE25	Basic Electrical Engg.	ES	E & E	E & E	4 (T)	80	20	100	4
6	15WSL26	Workshop Practice	ES	Mech., Auto, IP, IEM, Mfg. Engg.	Mech. Engg.	3(2 hrs lab+ 1 hr instruction)	80	20	100	2
7	15PHYL27	Engg. Physics Lab	BS	Physics	Basic Sc.	3(2 hrs lab+ 1 hr instruction)	80	20	100	2
8	15CPH28	Constitution of India, Professional Ethics and Human Rights	MNC	Humanities		2 (Tutorial)	40	10	50	--
9		Language (Kan.)	Mandatory Learning	Humanities		1 (T)	-	-	-	--
						29	600	150	750	24

Note: The Subjects Kannada and English are Audit Courses

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**I SEMESTER B.E./B.TECH.****CHEMISTRY GROUP**

Sl. No.	Subject Code	Subject		Teaching Department	Board	Theory /Lab/ Drawing (Hrs/ Week)	Examination Marks			Credits
							Th./Pr.	I.A.	Total	
1	15MAT11	Engineering Maths-I	BS	Maths	Basic Sc.	4 (T)	80	20	100	4
2	15CHE12	Engineering Chemistry	BS	Chemistry	Basic Sc.	4 (T)	80	20	100	4
3	15PCD13	Programming in C & Data Structures	ES	Any Engineering Department	CSE	4 (T)	80	20	100	4
4	15CED14	Computer Aided Engineering Drawing	ES	Mech./IP/Auto/ Mfg.Engg./ IEM	Mech. Engg.	6 (2I+ 4P)	80	20	100	4
5	15ELN15	Basic Electronics	ES	E & C / E & E / TC / IT	E & C	4 (T)	80	20	100	4
6	15CPL16	Computer Programming Lab	ES	Any Engineering Department	CSE	3(2 hrs lab+ 1 hr Tutorial )	80	20	100	2
7	15CHEL17	Engg. Chemistry Lab	BS	Chemistry	Basic Sci.	3(2 hrs lab+ 1 hr Tutorial )	80	20	100	2
8	15CIV18	Environmental Studies	MNC	Civil / Environmental	Civil	2 (Tutorial)	40	10	50	--
9		Language (Eng.)	Mandatory Learning	Humanities		1 (T)	-	-	-	--
Total						31	600	150	750	24

Note: The Subjects Kannada and English are Audit Courses

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM**  
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**SCHEME OF TEACHING AND EXAMINATION 2015-2016**

**II SEMESTER B.E./B.TECH.****CHEMISTRY GROUP**

Sl. No.	Subject Code	Subject		Teaching Department	Board	Theory /Lab/ Drawing (Hrs/ Week)	Examination Marks			Credits
							Th./Pr.	I.A.	Total	
1	15MAT21	Engineering Maths-II	BS	Maths	Basic Sc.	4 (T)	80	20	100	4
2	15CHE22	Engineering Chemistry	BS	Chemistry	Basic Sc.	4 (T)	80	20	100	4
3	15PCD23	Programming in C & Data Structures	ES	Any Engineering Department	CSE	4 (T)	80	20	100	4
4	15CED24	Computer Aided Engineering Drawing	ES	Mech./IP/Auto/ Mfg.Engg./ IEM	Mech. Engg.	6 (2I+ 4P)	80	20	100	4
5	15ELN25	Basic Electronics	ES	E & C / E & E / TC / IT	E & C	4 (T)	80	20	100	4
6	15CPL26	Computer Programming Lab	ES	Any Engineering Department	CSE	3(2 hrs lab+ 1 hr Tutorial )	80	20	100	2
7	15CHEL27	Engg. Chemistry Lab	BS	Chemistry	Basic Sc.	3(2 hrs lab+ 1 hr Tutorial )	80	20	100	2
8	15CIV28	Environmental Studies	MNC	Civil / Environmental	Civil	2 (Tutorial)	40	10	50	--
9		Language (Eng.)	Mandatory Learning	Humanities		1 (T)	-	-	-	--
Total						31	600	150	750	24

Note: The Subjects Kannada and English are Audit Courses

**Visvesvaraya Technological University  
Belgaum**

**MBA**

**Master of Business Administration**

**Draft Syllabus**

**(Effective from 2014-15)**

### III SEMESTER

Subject Code	Title of the Subject	Teaching hours / week			Duration of Exam Hours	Marks for		Total Marks
		Lecture	Practical / Field Work / Assignment	Total		IA	Exam	
	ELECTIVE 1	4	1	5	3	50	100	150
	ELECTIVE 2	4	1	5	3	50	100	150
	ELECTIVE 3	4	1	5	3	50	100	150
	ELECTIVE 4	4	1	5	3	50	100	150
	ELECTIVE 5	4	1	5	3	50	100	150
	ELECTIVE 6	4	1	5	3	50	100	150
	Total	24	6	30	18	300	600	900

Marketing Specialisation		Financial Specialisation		Human Resource Specialisation	
Subject code	Title of the Subject	Subject code	Title of the Subject	Subject Code	Title of the Subject
14MBA MM301	Consumer Behaviour	14MBA FM301	Principles & Practice of Banking	14MBA HR301	Industrial Relations & Legislations
14MBA MM302	Retail Management	14MBA FM302	Investment Banking & Financial Services	14MBA HR302	Recruitment & Selection
14MBA MM303	Marketing Research	14MBA FM303	Cost Management	14MBA HR303	Compensation & Benefits
14MBA MM304	Service Marketing	14MBA FM304	Advanced Financial Management	14MBA HR304	Learning & Development
14MBA MM305	Business Marketing	14MBA FM305	Investment Management	14MBA HR305	Knowledge Management
14MBA MM306	Supply Chain Management	14MBA FM306	Strategic Credit Management	14MBA HR306	Conflict & Negotiation Management

#### DUAL Specialization:

Marketing & Finance Specialisation		Marketing & Human Resources Specialisation		Finance & Human Resource Specialisation	
Subject code	Title of the Subject	Subject code	Title of the Subject	Subject Code	Title of the Subject
14MBA MM301	Consumer Behaviour	14MBA MM301	Consumer Behaviour	14MBA FM301	Principles & Practice of Banking
14MBA MM302	Retail Management	14MBA MM302	Retail Management	14MBA FM302	Investment Banking & Financial Services
14MBA MM303	Marketing Research	14MBA MM303	Marketing Research	14MBA FM303	Cost Management
14MBA FM301	Principles & Practice of Banking	14MBA HR301	Industrial Relations & Legislations	14MBA HR301	Industrial Relations & Legislations
14MBA FM302	Investment Banking &	14MBA HR302	Recruitment & Selection	14MBA HR302	Recruitment & Selection

	Financial Services						
14MBA FM303	Cost Management		14MBA HR303	Compensation & Benefits		14MBA HR303	Compensation & Benefits

**IV SEMESTER**

Subject code	Title of the Subject	Teaching hours / week			Duration of Exam Hours	Marks for		Total Marks
		Lecture	Practical / Field Work / Assignment	Total		IA	Exam	
	ELECTIVE 7	4	1	5	3	50	100	150
	ELECTIVE 8	4	1	5	3	50	100	150
	ELECTIVE 9	4	1	5	3	50	100	150
	ELECTIVE 10	4	1	5	3	50	100	150
	ELECTIVE 11	4	1	5	3	50	100	150
	ELECTIVE 12	4	1	5	3	50	100	150
	Total	24	6	30	18	300	600	900

Marketing Specialisation		Financial Specialisation		Human Resource Specialisation	
Subject Code	Title of the Subject	Subject Code	Title of the Subject	Subject Code	Title of the Subject
14MBA MM407	Sales Management	14MBA FM407	Mergers Acquisitions & Corporate Restructuring	14MBA HR407	Public relations
14MBA MM408	Integrated Marketing Communication	14MBA FM408	Risk Management and Insurance	14MBA HR408	Workplace Ethics
14MBA MM409	E-Marketing	14MBA FM409	Tax Management	14MBA HR409	International Human Resource Management
14MBA MM410	Strategic Brand Management	14MBA FM410	International Financial Management	14MBA HR410	Organisation Change and Development
14MBA MM411	Rural Marketing	14MBA FM411	Financial Derivatives	14MBA HR411	Strategic Talent Management
14MBA MM412	International Marketing Management	14MBA FM412	Corporate Valuation	14MBA HR412	Personal Growth & Interpersonal Effectiveness

**DUAL Specialisation:**

Marketing & Finance Specialisation		Marketing & Human Resources Specialisation		Finance & Human Resource Specialisation	
Subject Code	Title of the Subject	Subject Code	Title of the Subject	Subject Code	Title of the Subject
14MBA MM407	Sales Management	14MBA MM407	Sales Management	14MBA FM407	Mergers Acquisitions & Corporate Restructuring
14MBA MM408	Integrated Marketing Communication	14MBA MM408	Integrated Marketing Communication	14MBA FM408	Risk Management and Insurance
14MBA MM409	E-Marketing	14MBA MM409	E-Marketing	14MBA FM409	Tax Management
14MBA FM407	Mergers Acquisitions & Corporate Restructuring	14MBA HR407	Public relations	14MBA HR407	Public relations
14MBA FM408	Risk Management and	14MBA HR408	Workplace Ethics	14MBA HR408	Workplace Ethics



	Insurance					
14MBA FM409	Tax Management		14MBA HR409	International Human Resource Management		14MBA HR409
						International Human Resource Management

**\*\* Between the II Semester and III Semester, after availing a vocation of 2 weeks.**

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM**  
**SCHEME OF TEACHING AND EXAMINATION FOR**  
**M.Tech. Structural Engineering**

**III Semester: INTERNSHIP**

**CREDIT BASED**

Course Code	Subject	No. of Hrs./Week		Duration of the Exam in Hours	Marks for		Total Marks	CREDITS
		Lecture	Practical / Field Work		I.A.	Exam		
14CSE31	Seminar / Presentation on Internship (After 8 weeks from the date of commencement)	-	-	-	25	-	25	1
14 CSE 32	Report on Internship	-	-	-		75	75	15
14 CSE 33	Evaluation and Viva-voce	-	-	-	-	50	50	4
	<b>Total</b>	-	-	-	<b>25</b>	<b>125</b>	<b>150</b>	<b>20</b>

\* The student shall make a midterm presentation of the activities undertaken during the first 8 weeks of internship to a panel comprising **Internship** Guide, a senior faculty from the department and Head of the Department.

# The College shall facilitate and monitor the student internship program.

The internship report of each student shall be submitted to the University.

**\*\*Between the III Semester and IV Semester after availing a vacation of 2 weeks.**

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM**  
**SCHEME OF TEACHING AND EXAMINATION FOR**  
**M.Tech. Structural Engineering**

**IV Semester**

**CREDIT BASED**

Subject Code	Subject	No. of Hrs./Week		Duration of Exam in Hours	Marks for		Total Marks	CREDITS
		Lecture	Field Work / Assignment / Tutorials		I.A.	Exam		
14CSE41	Stability of Structures	4	2	3	50	100	150	4
14 CSE 42X	Elective-3	4	2	3	50	100	150	4
14 CSE 43	Evaluation of Project Phase-I	-	-	-	25	-	25	1
14 CSE 44	Evaluation of Project Phase-II	-	-	-	25	-	25	1
14 CSE 45	Evaluation of Project Work and Viva-voce	-	-	3	-	100+100	200	18
<b>Total</b>		<b>8</b>	<b>04</b>	<b>09</b>	<b>150</b>	<b>400</b>	<b>550</b>	<b>28</b>
<b>Grand Total (I to IV Sem.) : 2400 Marks; 94 Credits</b>								

**Elective – 3**

14 CSE 421 Composite and Smart materials

14 CSE 422 Optimisation of Structures

14 CSE 423 Design of concrete bridges

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM**  
**SCHEME OF TEACHING AND EXAMINATION FOR**  
**M.TECH. Machine Design**

**III SEMESTER : INTERNSHIP**

**CREDIT BASED**

Course Code	Subject	No. of Hrs./Week		Duration of the Exam in Hours	Marks for		Total Marks	CREDITS
		Lecture	Practical / Field Work		I.A.	Exam		
14MMD31	SEMINAR / PRESENTATION ON INTERNSHIP (AFTER 8 WEEKS FROM THE DATE OF COMMENCEMENT)	-	-	-	25	-	25	20
14MMD 32	REPORT ON INTERNSHIP	-	-	-		75	75	
14MMD 33	INTERNSHIP EVALUATION AND VIVA-VOCE	-	-	-	-	50	50	
	<b>Total</b>	-	-	-	<b>25</b>	<b>125</b>	<b>150</b>	<b>20</b>

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM**  
**SCHEME OF TEACHING AND EXAMINATION FOR**  
**M.TECH. Machine Design**

**IV SEMESTER**

**CREDIT BASED**

Subject Code	Subject	No. of Hrs./Week		Duration of Exam in Hours	Marks for		Total Marks	CREDITS
		Lecture	Field Work / Assignment / Tutorials		I.A.	Exam		
14MDE41	Tribology and Bearing Design	4	--	3	50	100	150	4
	ELECTIVE-III	4	-	3	50	100	150	4
14MMD43	EVALUATION OF PROJECT WORK PHASE-II	-	-	-	25	-	25	1
14MMD44	EVALUATION OF PROJECT WORK PHASE-III	-	-	-	25	-	25	1
14MMD45	EVALUATION OF PROJECT WORK AND VIVA-VOCE	-	-	3	-	100+100	200	18
<b>Total</b>		<b>12</b>	<b>07</b>	<b>09</b>	<b>150</b>	<b>400</b>	<b>550</b>	<b>28</b>
<b>Grand Total (I to IV Sem.) : 2400 Marks; 94 Credits</b>								

**ELECTIVE-III**

14CAE 421	Fracture Mechanics	14MDE 423	Robust Design
14MST422	Smart Materials & Structures	14CAE 424	Finite Element Methods for Heat Transfer and Fluid Flow Analysis.
14MEA425	Computational Fluid Dynamics		

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

## SCHEME OF TEACHING AND EXAMINATION FOR M.TECH(COMPUTER SCIENCE and ENGINEERING)

**III Semester: INTERNSHIP**

**Total Credits: 20**

Subject Code	Name of the Subject	No. of Hrs./Week		Duration of the Exam in Hours	Marks for		Total Marks	CREDITS
		Lecture	Practical / Fieldwork		I.A.	Exam		
14SCS31	Seminar / Presentation on Internship (After 8 weeks from the date of commencement) *	--	--	--	25	--	25	1
14SCS32	Report on Internship **	--	--	--	--	75	75	15
14SCS33	Evaluation and Viva-voce	--	--	3	--	50	50	4
	<b>Total</b>	--	--	<b>3</b>	<b>25</b>	<b>125</b>	<b>150</b>	<b>20</b>

**\*The student shall make a midterm presentation of the activities undertaken during the first 8 weeks of internship to a panel comprising Internship Guide, a senior faculty from the department and Head of the Department.**

**# The College shall facilitate and monitor the student internship program.**

**The internship report of each student shall be submitted to the University.**

**\*\*Between the III Semester and IV Semester after availing a vacation of 2 weeks.**

# VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM

## SCHEME OF TEACHING AND EXAMINATION FOR M.TECH(COMPUTER SCIENCE and ENGINEERING)

**IV Semester**

**Total Credits: 28**

Subject Code	Name of the Subject	Teaching hours/week		Duration of Exam in Hours	Marks for		Total Marks	CREDITS	
		Lecture	Fieldwork/Assignment / Tutorials		I.A.	Exam			
14SCS41	Machine Learning Techniques	4	2 *	03	50	100	150	4	
14SCS42x	Elective-III	4	2	03	50	100	150	4	
14SCS43	Evaluation of Project Phase-II	0	--	0	25	--	25	1	
14SCS44	Evaluation of Project Phase-III	0	--	0	25	--	25	1	
14SCS45	Evaluation of Project Work and Viva-voce	--	3	03	--	100 + 100	200	18	
<b>Total</b>		<b>08</b>	<b>07</b>	<b>09</b>	<b>150</b>	<b>400</b>	<b>550</b>	<b>28</b>	
<b>Grand Total (I to IV Sem.)</b>		<b>Marks: 2400 ; Credits : 94</b>							

### **Elective – III**

14SCS421 Computer Vision

14SCS422 Business Intelligence and its Applications

14SCS423 Agile Technologies

14SCS424 Wireless Network and Mobile Computing

**L- Lecture , T- Tutorial, P- Practical**

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM**  
**SCHEME OF TEACHING AND EXAMINATION FOR**  
**M.TECH. M.TECH.Thermal Power Engineering.**

**III SEMESTER : INTERNSHIP**

**CREDIT BASED**

Course Code	Subject	No. of Hrs./Week		Duration of the Exam in Hours	Marks for		Total Marks	CREDITS
		Lecture	Practical / Field Work		I.A.	Exam		
14MTP31	SEMINAR / PRESENTATION ON INTERNSHIP (AFTER 8 WEEKS FROM THE DATE OF COMMENCEMENT)	-	-	-	25	-	25	20
14MTP 32	REPORT ON INTERNSHIP	-	-	-		75	75	
14MTP 33	INTERNSHIP EVALUATION AND VIVA-VOCE	-	-	-	-	50	50	
	<b>Total</b>	-	-	-	<b>25</b>	<b>125</b>	<b>150</b>	<b>20</b>



**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM**  
**SCHEME OF TEACHING AND EXAMINATION FOR**  
**M.TECH. M.TECH. Thermal Power Engineering.**

**IV SEMESTER**

**CREDIT BASED**

Subject Code	Subject	No. of Hrs./Week		Duration of Exam in Hours	Marks for		Total Marks	CREDITS
		Lecture	Field Work / Assignment / Tutorials		I.A.	Exam		
14MTP41	Design of Heat Transfer Equipments for Thermal Power Plant	4	--	3	50	100	150	4
	ELECTIVE-III	4	-	3	50	100	150	4
14MTP43	EVALUATION OF PROJECT WORK PHASE-II	-	-	-	25	-	25	1
14MTP44	EVALUATION OF PROJECT WORK PHASE-III	-	-	-	25	-	25	1
14MTP45	EVALUATION OF PROJECT WORK AND VIVA-VOCE	-	-	3	-	100+100	200	18
<b>Total</b>		<b>12</b>	<b>07</b>	<b>09</b>	<b>150</b>	<b>400</b>	<b>550</b>	<b>28</b>
<b>Grand Total (I to IV Sem.) : 2400 Marks; 94 Credits</b>								

**ELECTIVE-III**

14MTP421	Convective Heat and Mass Transfer	14MTP423	Design & Analysis of Thermal Systems
14MTP422	Engine Flow & Combustion	14MTP 424	Experimental Methods in Thermal Power Engineering

**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM**  
**SCHEME OF TEACHING AND EXAMINATION FOR**  
**M.Tech. Electronics**

**III Semester: INTERNSHIP #****CREDIT BASED**

Course Code	Subject	Teaching hours/week		Duration of the Exam in Hours	Marks for		Total Marks	CREDITS
		Lecture	Practical / Field Work		I.A.	Exam		
14ELD31	Midterm Presentation on Internship (After 8 weeks from the date of commencement) *	-	-	-	25	-	25	1
14ELD32	Report on Internship (After 16 weeks from the date of commencement)	-	-	-	75		75	15
14ELD33	Evaluation and Viva-voce	-	-	3	-	50	50	4
	<b>Total</b>	-	-	-	<b>100</b>	<b>50</b>	<b>150</b>	<b>20</b>

\* The student shall make a midterm presentation of the activities undertaken during the first 8 weeks of internship to a panel comprising Internship Guide, a senior faculty from the department and Head of the Department.

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**VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELGAUM**  
**SCHEME OF TEACHING AND EXAMINATION FOR**  
**M.Tech. Electronics**

IV Semester

CREDIT BASED

Subject Code	Subject	Teaching hours/week		Duration of Exam in Hours	Marks for		Total Marks	CREDITS
		Lecture	Practical / Field Work / Assignment/ Tutorials		I.A.	Exam		
14ELD41	Advanced Computer Architecture	4	2	3	50	100	150	4
14ELD42X	Elective-3	4	2	3	50	100	150	4
14ELD43	Evaluation of Project Phase-I	-	-	-	25	-	25	1
14ELD44	Phase-II : Midterm evaluation of Project	-	-	-	25	-	25	1
14ELD45	Evaluation of Project Work and Viva-voce	-	-	3	-	100+100	200	18
<b>Total</b>		<b>8</b>	<b>04</b>	<b>09</b>	<b>150</b>	<b>400</b>	<b>550</b>	<b>28</b>
<b>Grand Total (I to IV Sem.) : 2400 Marks; 94 Credits</b>								

**Elective -3:**

14 EVE 421	Advances in VLSI Design	14 ELD 424	Cryptographic Systems
14 ELD 422	Image and Video Processing	14 ELD 425	Advanced Microcontrollers
14 ECS 423	RF and Microwave Circuit Design		