Scheme of Teaching and Examination 2018 – 19

Outcome Based Education(OBE) and Choice Based Credit System (CBCS)

B.E.in AERONAUTICAL ENGINEERING

(Effective from the academic year 2018 - 19)

VIII S	SEMESTER											
SI.	Cour	se and	Course Title		Teaching	g Hours ,	/Week		Exami	nation		
No.	Cours	e code		Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	E Marks	SEE Marks	Total Marks	Credits
				P Q	T Dep				GE	🖁	6	ပြ
1	PCC	18AE81	Flight Vehicle Design		3					60	100	3
2	PEC	18AE82X	Professional Elective - 4		3					60	100	3
3	Project	18AEP83	Project Work Phase - 2		2				40	60	100	8
4	Seminar	18 AE S84	Technical Seminar		2				100		100	1
5	Internship	18AEI85	Internship	Complete	on/s of	03	40	60	100	3		
				VI and VI VIII seme	l semesters esters.)	and /or	VII and					
		•	•	Total	06		04	15	260	240	500	18

Note: PCC: Professional Core, PEC: Professional Elective.

Professional Electives - 4

Course code under 18XX82X	Course Title
18AE821	Avionics
18AE822	Boundary Layer Theory
18AE823	Helicopter Dynamics
18AE824	Flight Testing

Project Work

CIE procedure for Project Work Phase - 2:

(i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and guestion and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable.

The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and guestion and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Project Work Phase - 2:

- (i) Single discipline: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department.
- (ii) Interdisciplinary: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.

Internship: Those, who have not pursued /completed the internship shall be declared as fail and have to complete during subsequent University examination after satisfying the internship requirements.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

Activity points of the students who have earned the prescribed AICTE activity Points shall be sent the University along with the CIE marks of 8th semester. In case of students who have not satisfied the AICTE activity Points at the end of eighth semester, the column under activity Points shall be marked NSAP (Not Satisfied Activity Points).

Scheme of Teaching and Examination 2018 – 19

Outcome Based Education (OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2018 – 19)

					Teach	ing Hou	rs/Week		Exami	ination		
Sl. No		rse and rse code	Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P	_		5	I	
1	PCC	18AU61	Automotive Chassis & Suspension	Automobile Engg.	3	2		03	40	60	100	4
2	PCC	18AU62	Heat and Mass transfer	Automobile Engg.	3	2		03	40	60	100	4
3	PCC	18AU63	Design of Machine Elements-II	Automobile Engg.	3	2		03	40	60	100	4
4	PEC	18AU64X	Professional Elective -1	Automobile Engg.	3			03	40	60	100	3
5	OEC	18AU65X	Open Elective -A	Automobile Engg.	3			03	40	60	100	3
6	PCC	18AUL66	Automotive Chassis Components Lab	Automobile Engg.		2	2	03	40	60	100	2
7	PCC	18AUL67	Engine Testing and Emission Measurement Lab.	Automobile Engg.		2	2	03	40	60	100	2
8	MP	18AUMP68	Mini-project	Automobile Engg.		-	2	(03)	40	60	100	2
9	Internship		Internship	To be carried and VIII sem		ng the v	acation/s	of VI and	l VII sei	nesters :	and /or V	/II
	•			TOTAL	15	10	06	24	320	480	800	24

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project.

	Professional Elective -1
Course code under 18AU64X	Course Title
18AU641	Alternative Energy Sources for Automobiles
18AU642	Composite Materials
18AU643	Automotive Pollution and Control

Open Elective -A

Students can select any one of the open electives offered by other Departments expect those that are offered by the parent Department (Please refer to the list of open electives under 18AU65X).

Selection of an open elective shall not be allowed if,

- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.

Mini-project work:

Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary Mini- project can be assigned to an individual student or to a group having not more than 4 students.

CIE procedure for Mini-project:

(i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the Mini-project work, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all the guides of the college.

The CIE marks awarded for the Mini-project, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Mini-project:

- (i) Single discipline: Contribution to the Mini-project and the performance of each group member shall be assessed individually in the semester end examination (SEE) conducted at the department.
- (ii) Interdisciplinary: Contribution to the Mini-project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.

Internship: All the students admitted to III year of BE/B.Tech. shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take-up/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship

Scheme of Teaching and Examination 2018 – 19

Outcome Based Education(OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2018 – 19)

VII	SEMESTER											
					Teachi	ng Hours	/Week		Exami	nation		
Sl. No		se and se code	Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	Т	P	-		01		
1	PCC	18AU71	Finite Element Modelling and Analysis	Automobile Engg.	3			03	40	60	100	3
2	PCC	18AU72	Automotive Electrical and Electronic Systems	Automobile Engg.	3		1	03	40	60	100	3
3	PEC	18AU73X	Professional Elective - 2	Automobile Engg.	3		-	03	40	60	100	3
4	PEC	18AU74X	Professional Elective - 3	Automobile Engg.	3			03	40	60	100	3
5	OEC	18AU75X	Open Elective -B	Automobile Engg.	3			03	40	60	100	3
6	PCC	18AUL76	Automobile Scanning and Re-conditioning lab	Automobile Engg.		2	2	03	40	60	100	2
	PCC	18AUL77	Modelling and Analysis Lab	Automobile Engg.		2	2	03	40	60	100	2
7)	Project	18AUP78	Project Work Phase - 1	Automobile Engg.	-	-	2	-	100		100	1
8	Internship		Internship	(If not complet out during the	_					ers, it sh	all be ca	rried
				TOTAL	17	04	04	18	340	360	700	20

Note: PCC: Professional core, PEC: Professional Elective.

	Professional Elective - 2							
Course code under	Course Title							
18AU73X								
18AU731	CAD/CAM							
18AU732	Earthmoving Equipment & Tractors							
18AU733	18AU733 Computer Integrated Manufacturing							
	Professional Electives - 3							
Course code under	Course Title							
18AU74X								
18AU741	Control Engineering							
18AU742	Operations Research							
18AU743	Two and Three wheeled Vehicle							

Open Elective -B

Students can select any one of the open electives offered by other Departments expect those that are offered by the parent Department (Please refer to the list of open electives under 18AU75X).

Selection of an open elective shall not be allowed if,

- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.

Project work:

Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary project can be assigned to an individual student or to a group having not more than 4 students. In extraordinary cases, like the funded projects requiring students from different disciplines, the project student strength can be 5 or 6.

CIE procedure for Project Work Phase - 1:

(i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the project work phase -1, shall be based on the evaluation of the project work phase -1 Report (covering Literature Survey, Problem identification, Objectives and Methodology), project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the Project report shall be the same for all the batch mates.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable.

The CIE marks awarded for the project work phase -1, shall be based on the evaluation of project work phase -1 Report (covering Literature Survey,

Scheme of Teaching and Examination 2018 – 19

$Outcome\ Based\ Education (OBE)\ and\ Choice\ Based\ Credit\ System\ (CBCS)$

(Effective from the academic year 2018 - 19)

VIII S	SEMESTER				•	•			•			
					Teacl	hing Hou	ırs /Week		Exami	nation		
SI. No		rse and rse code	Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P				1	
1	PCC	18AU81	Vehicle Body Engineering and Safety	Automobile Engg.	3			03	40	60	100	3
2	PEC	18AU82X	Professional Elective - 4	Automobile Engg.	3			03	40	60	100	3
3)	Project	18AUP83	Project Work Phase - 2	Automobile Engg.		-	2	03	40	60	100	8
4	Seminar	18AUS84	Technical Seminar	Automobile Engg.			2	03	100	-	100	1
(5)	5 Internship 18AUI85 Internship Completed during the vacation/s of VI and VII semesters and /or VII and VIII semesters.)							03	(40)	60)	100	3
TOTAL							04	15	260	240	500	18

Note: PCC: Professional Core, PEC: Professional Elective.

	Professional Electives - 4
Course code	Course Title
under 18AU82X	
18AU821	Mechanical Vibrations
18AU822	Advanced I. C. Engines
18AU823	Electric and Hybrid Vehicle.

Project Work

CIE procedure for Project Work Phase - 2:

(i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable.

The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Project Work Phase - 2:

- (i) Single discipline: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department.
- (ii) Interdisciplinary: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.

Internship: Those, who have not pursued /completed the internship shall be declared as fail and have to complete during subsequent University examination after satisfying the internship requirements.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card. Activity points of the students who have earned the prescribed AICTE activity Points shall be sent the University along with the CIE marks of 8th semester. In case of students who have not satisfied the AICTE activity Points at the end of eighth semester, the column under activity Points shall be marked NSAP (Not Satisfied Activity Points).



Outcome Based Education(OBE) and Choice Based Credit System (CBCS) VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI Scheme of Teaching and Examination 2018 - 19 (Effective from the academic year 2018 – 19)

Programme: BIOTECHNOLOGY

뙷	VIII SEMESTER											
					Teaching Hours /Week	urs /Week			Exami	Examination		
	Course and Course Code	e and Code	Course Title	Teaching Jepartment	Треогу Гесіпге	IsirotuT	Vractical/ gaiward	ni noiteru eruod	IE Marks	ee Marks	tal Marks	StiborO
				I	1	T	Ь	a	э	IS	οT	
PCC	<i>r</i>)	18BT81	Regulatory Affairs in Biotech Industry	Biotech	3	:	1	03	40	09	100	3
PEC	<i>r</i>)	18BT82X	Professional Elective - 4	Biotech	3	:	:	03	40	09	100	3
Proj	Project	18BTP83	Project Work Phase - 2	1		1	2	03	40	09	100	8
Sen	Seminar	18BTS84	Technical Seminar	ı	ŀ	:	2	03	100	:	100	1
Inte	Internship	18BTI85	Internship	Completed during the vacation/s of VI and VII semesters and /or VII semesters.	of VI and VII semesters.	semesters	and /or	03	40	09	100	3
	-			TOTAL	90	:	40	15	790	240	200	18
20a	: Professio	mal Core, PE	Note: PCC: Professional Core, PEC: Professional Elective.									
				Professional Electives - 4								

Course code under 18BT82X	Course Title
18BT821	Environmental Biotechnology
18BT822	Industrial Microbiology
18BT823	Marine Biotechnology

Project Work

CIE procedure for Project Work Phase - 2:

(i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the

The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50.25:25.The marks awarded for the project report shall be the same for all the batch mates.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable. The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50.25:25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Project Work Phase - 2:

(ii) Interdisciplinary: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments (i) Single discipline: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department. to which the student/s belong to.

Internship: Those, who have not pursued /completed the internship, will be declared as failed and have to complete during subsequent University examination after satisfying the internship requirements.

AICTE activity Points: In case a student fails to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. The principals shall include the prescribed activity points earned by the students along with the CIE marks.

Outcome Based Education(OBE) and Choice Based Credit System (CBCS) VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI Scheme of Teaching and Examination 2018-19 (Effective from the academic year 2018 – 19)

Programme: BIOTECHNOLOGY

>	VI SEMESTER	STER											
						Teaching Hours /Week	ours /Week			Exam	Examination		
<i>v</i> 2	S S.	Cours	Course and Course Code	Course Title	Teaching Department	Треогу Гесциге	IsirotuT	Practical/ Drawing	ni noiteruC eruod	CIE Marks	SEE Marks	otal Marks	5
						Т	Т	Ь	I)	8	L	
	PCC 1	Ç	18BT61	Process Control & Automation	Chemical	4	-	ł	03	40	09	100	
	2 PCC	C	18BT62	Bioprocess Equipment Design & CAED	Chemical	4	2		04	40	09	100	ľ
	3 PCC	Ç	18BT63	Bioinformatics	Biotech	4	1	1	03	40	09	100	
Ĺ	4 PEC	C	18BT64X	Professional Elective -1	Biotech	3	:	1	03	40	09	100	
	5 OEC	Ç.	18BT65X	Open Elective -A	Biotech	3	1	1	03	40	09	100	
Ĺ	9 PCC	Ç	18BTL66	Process Control & Automation Laboratory	Chemical	1	2	2	03	40	09	100	
	7 PCC	Ç	18BTL67	Bioinformatics Laboratory	Biotech	1	2	2	03	40	09	100	
	8 MP		18BTMP68	Mini-project	•	-	1	2	03	40	09	100	
	9 Inte	Internship	-	Internship		To be carried out during the vacation/s of VI and VII semesters and /or VII and versions of the carried out during the vacation/s of VI and versions.	ed out durir	ng the vaca	tion/s of VI ar semesters.	I and VII sers.	emesters a	nd /or VII	v bu
					TOTAL	18	08	90	25	320	480	800	7

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4 4 c

Credits

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project

Mini-project work:

Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary Mini-project can be assigned to an individual student or to a group having not more than 4 students.

(i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the CIE procedure for Mini-project:

The CIE marks awarded for the Min-project work, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded

for the project report shall be the same for all the batch mates.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all guides of the college.

The CIE marks awarded for the Mini-project, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

Scheme of Teaching and Examination 2018 – 19

Choice Based Credit System (CBCS) AND Outcome Based Education (OBE)

(Effective from the academic year 2018 - 19)

					Teachi	ng Hours	/Week		Examir	ation		
Sl. No		rse and se code	Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	Т	P			3,	1	
1	PCC	18CS81	Internet of Things	CS / IS	3			03	40	60	100	3
2	PEC	18CS82X	Professional Elective – 4	CS / IS	3			03	40	60	100	3
(3)	Project	18CSP83	Project Work Phase – 2	CS / IS			2	03	40	60	100	8
4	Seminar	18CSS84	Technical Seminar	CS / IS			2	03	100	-	100	1
5)	INT	(18CSI85)	Internship	(Comple interveni VII seme VIII sem	ng vacat esters and	ions of V		03	40	60	100	3
				TOTAL	06		04	15	260	240	500	18

Note: PCC: Professional Core, PEC: Professional Elective, OEC: Open Elective, INT: Internship.

	Professional Electives – 4
Course code under 18CS82X	Course Title
18CS821	Mobile Computing
18CS822	Storage Area Networks
18CS823	NoSQL Database
18CS824	Multicore Architecture and Programming

Project Work CIE procedure for Project Work Phase - 2:

- (i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide. The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.
- (ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable. The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Project Work Phase - 2:

- (i) Single discipline: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department.
- (ii) Interdisciplinary: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.

Internship: Those, who have not pursued /completed the internship shall be declared as fail and have to complete during subsequent University examination after satisfying the internship requirements

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card. Activity points of the students who have earned the prescribed AICTE activity Points shall be sent the University along with the CIE marks of 8th semester. In case of students who have not satisfied the AICTE activity Points at the end of eighth semester, the column under activity Points shall be marked NSAP (Not Satisfied Activity Points).



Scheme of Teaching and Examination 2018 - 19

Choice Based Credit System (CBCS) AND Outcome Based Education (OBE)

(Effective from the academic year 2018 – 19)

VI SE	EMESTE.	R										
					Teachi	ng Hours	/Week		Exami	ination		l
Sl. No	_	ourse and ourse code	Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Fotal Marks	Credits
					L	Т	P					
1	PCC	18CS61	System Software and Compilers	CS / IS	3	2		03	40	60	100	4
2	PCC	18CS62	Computer Graphics and Visualization	CS / IS	3	2		03	40	60	100	4
3	PCC	18CS63	Web Technology and its applications	CS / IS	3	2		03	40	60	100	4
4	PEC	18CS64X	Professional Elective -1	CS / IS	3			03	40	60	100	3
5	OEC	18CS65X	Open Elective –A	CS / IS	3			03	40	60	100	3
6	PCC	18CSL66	System Software Laboratory	CS / IS		2	2	03	40	60	100	2
7	PCC	18CSL67	Computer Graphics Laboratory with mini project	CS / IS		2	2	03	40	60	100	2
8)	MP	18CSMP68	Mobile Application Development	CS / IS	1		2	03	40	60	100	2
9)	INT	-	Internship	(To be carrintervening semesters)				-	-		-	
				TOTAL	15	10	06	24	320	480	800	24

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project, INT: Internship.

	Professional Elective -1
Course code under18XX64X	Course Title
18CS641	Data Mining and Data Warehousing
18CS642	Object Oriented Modelling and Design
18CS643	Cloud Computing and its Applications
18CS644	Advanced JAVA and J2EE
18CS645	System Modelling and Simulation
	Open Elective –A (Not for CSE / ISE Programs)
18CS651	Mobile Application Development
18CS652	Introduction to Data Structures and Algorithms
18CS653	Programming in JAVA
18CS654	Introduction to Operating System

Students can select any one of the open electives offered by any Department (Please refer to the list of open electives under 18CS65X).

Selection of an open elective is not allowed provided,

- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Adviser/Mentor.

Mini-project work: Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary Mini-project can be assigned to an individual student or to a group having not more than 4 students.

CIE procedure for Mini-project:

- (i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide. The CIE marks awarded for the Mini-project work, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.
- (ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all the guides of the college. The CIE marks awarded for the Mini-project, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Mini-project:

- (i) Single discipline: Contribution to the Mini-project and the performance of each group member shall be assessed individually in the semester end examination (SEE) conducted at the department.
- (ii) Interdisciplinary: Contribution to the Mini-project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belongs to.

Internship: All the students admitted to III year of BE/B. Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not takeup/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI	Scheme of Teaching and Examination 2018-19	Outcome Based Education(OBE) and Choice Based Credit System (CBCS)	(Effective from the academic year 2018 – 19)
VISVESVARAYA TECHNOLOGICAL UNIVERSITY, B	Scheme of Teaching and Examination 2018-1	Outcome Based Education(OBE) and Choice Based Credit Sy	(Effective from the academic year 2018 – 19)

Programme: CIVIL ENGINEERING

			i	1	1			. 1
	Credits		3	3	8	1	3	18
	Lotal Marks	L	100	100	100	100	100	200
Examination	SEE Marks	:	09	09	09	:	09	240
EX	CIE Marks)	40	40	40	100	40	260
	ni noiteruO eruod	[03	03	03	03	03	15
/week	Practical/ Brawing	Ь	:	ŀ	16	2	and VII ers.)	18
ng Hours	IsirotuT	L	:	1		:	n/s of VI I semeste	:
I eachi	Треогу Lecture	Т	3	3	•	:	the vacatio	90
	Teaching JnomriagoO		Civil Engg.	Civil Engg.	Civil Engg.	Civil Engg.	Completed during semesters and /or '	TOTAL
	Course Title		Design of Pre-stressed Concrete	Professional Elective - 4	Project Work Phase - 2	Technical Seminar	Internship	
	Course and course code		18CV81	18CV82X	18CVP83	18CVS84	18CVI85	
			PCC	PEC	Project	Seminar	Internship	
	SI. No		1	2	3	4	5	
	TCACHING HOURS / WCCA.	Course and Teaching Teaching Theory T	Course and Teaching Department Theory Described Theory The	Course and Course Title Course Course and Teaching Theory T	Course and Course Title	Course and Course Title Course Title Course Title Course Title Course Title Course Code Course Title Course Code Co	Course and Course Title	Course and Course Title

Note: PCC: Professional Core, PEC: Professional Elective.

	Professional Electives - 4
Course code under 18CV82X	Course Title
18CV821	Bridge Engineering
18CV822	Prefabricated Structures
18CV823	Advanced Foundation Engineering
18CV824	Rehabilitation & Retrofitting
18CV825	Pavement Design

Project Work

CIE procedure for Project Work Phase - 2:

(i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50.25:25. The marks awarded for the project report shall be the same for all the batch mates.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable. The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50.25.25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Project Work Phase - 2:

		credits		4	4	4	3	3	2	2	2	pu	24				
		Total sarks		100	100	100	100	100	100	100	100	/or VII a	800				
	Examination	EE Marks	IS	09	09	09	09	09	09	09	09	ters and	480				
	Exami	E Marks	C	40	40	40	40	40	40	40	40	II semes	320				
		ouration n hours		03	03	03	03	03	03	03	80	VI and V	24				
19 ystem (CBCS	Teaching Hours /Week	Practic Al Alanin Bractic	Ь	1	:	1	:	:	2	2	2	To be carried out during the vacation/s of VI and VII semesters and /or VII and VIII semesters.	90				
n 2018 – I Credit S 018 – 19)	hing Hou	sirotuT I	L	2	2	2	1	1	2	2	2	uring the	12	i-project			
mination by Basec	Tead	Треогу Гесtиге	1	3	33	33	က	33	:	:	-	d out di		AP: Min	tive -1		
CIVIL ENGINEERING aching and Examinat (OBE) and Choice Bas om the academic year		Teaching Pepartment	1	Civil Engg.	Civil Engg.	Civil Engg.	Civil Engg.	Civil Engg.	Civil Engg.	Civil Engg.	Civil Engg.	To be carried o	TOTAL 15	n Elective, l	Professional Elective -1		
VISVESVARATA TECHNOLOGICAL UNIVERSITY, BELAGAVI CIVIL ENGINEERING Scheme of Teaching and Examination 2018 – 19 Outcome Based Education(OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2018 – 19)		Course Title		gn of Steel Structural	Applied Geotechnical Engineering	Hydrology and Irrigation Engineering	Professional Elective -1	Open Elective -A	Software Application Laboratory	Environmental Engineering Laboratory	Extensive Survey project	qi	TC	sional Elective, OE: Open Elective, MP: Mini-project.	Profe		-
Outcome		0		Design of Elements	Applied Geot Engineering	Hydrology a: Engineering	Professi	Open Ele	Software A _l Laboratory	Environmental Engineering La	Extensiv	Internship		rofessior		4X	
		Course and Course code		18CV61	18CV62	18CV63	18CV64X	18CV65X	18CVL66	18CVL67	18CVEP68	•		Note: PCC: Professional core, PEC: Profes		Course code under18CV64X	
VI SEMESTER		Cours		PCC	PCC	PCC	PEC	0EC	PCC	PCC	EP	Internship		CC: Profession		Course co	
/I SEV		SI. No		-	2	3	4	2	9	7	8	6		Note: I			

SCHEME OF TEACHING AND EXAMINATION B.E Telecommunication Engineering

VIII SEMESTER

5	Curbicot		Teaching Hours /Week	g Hours	Examination	uo			Credit
No N	No Code	Title	Theory	Practical /Drawing	Duration	n I.A.	Theory/ Practical Marks	Total Marks	
1	15EC81	Wireless Cellular and LTE 4G Broadband	4	l	3	20	80	100	4
2	15EC82	Fiber Optics and Networks	4	I	3	20	08	100	4
3	15XX83X	Professional Elective-5	3	I	3	20	08	100	3
4	15EC84	Internship/Professional Practice	Industry	Industry Oriented	3	20	20	100	2
5	15ECP85	Project Work		9	3	100	100	200	9
9	15ECS86	Seminar	1	4	ı	100	ı	100	
		TOTAL	11	10	15	310	390	200	20

Professional Elective -5	15EC831 Micro Electro Mechanical Systems	15EC832 Speech Processing	15EC833 Radar Engineering	15EC834 Machine Learning	15TE835 ADHOC Wireless Networks
Professio:	15EC831	15EC832	15EC833	15EC834	15TE835

1. Internship / Professional Practice: To be carried between the (6th and 7th Semester) or (7th and 8th Semester) Vacation period.

B.E.: Electronics & Communication Engineering

VIII SEMESTER

									•	
5	9		Teaching Department	Teachii /W	Teaching Hours /Week		Examination	ıtion		Credits
No No	Code	Title		Theory	Practical/ Drawing	Duration in hours	SEE Marks	CIE Marks	Total Marks	
1	17EC81	Wireless Cellular and LTE 4G Broadband	EC	4	1	3	09	40	100	4
2	17EC82	Fiber Optics & Networks	EC	4	1	3	09	40	100	4
3	17EC83X	Professional Elective-5	EC	3	1	3	09	40	100	3
4	17EC84	Internship/Professional Practice	EC	Industry	Industry Oriented	3	50	50	100	2
5	17ECP85	Project Work	EC	ı	9	3	100	100	200	9
9	17ECS86	Seminar	EC	ı	4	1	ı	100	100	1
		TOTAL		Theory: 11 hours Project and Seminar: 10 hours	11 hours nd 10 hours	15	330	370	700	20

Professional Elective -5	Elective -5
17EC831	Micro Electro Mechanical Systems
17EC832	Speech Processing
17EC833	Radar Engineering
17EC834	Machine learning
17EC835	Network and Cyber Security

1. Internship/ Professional Practice: 4 Weeks internship to be completed between the (VI and VII semester vacation) and/or (VII and VIII semester vacation) period.

B.E.: Electronics & Communication Engineering

VII	VII SEMESTER									
5			Teaching Department	Teachir /W	Teaching Hours /Week		Examination	tion		Credits
Ž Ž	Course Code	Title		Theory	Practical/ Drawing	Duration in hours	SEE Marks	CIE Marks	Total Marks	
_	17EC71	Microwave and Antennas	EC	04		03	09	40	100	4
7	17EC72	Digital Image Processing	EC	04		03	09	40	100	4
8	17EC73	Power Electronics	EC	04		03	09	40	100	4
4	17EC74X	Professional Elective-3	EC	03		03	09	40	100	3
S	17EC75X	Professional Elective-4	EC	03		03	09	40	100	8
9	17ECL76	Advanced Communication Lab	EC	01-Hour Instruction 02-Hour Practical	struction actical	03	09	40	100	2
7	17ECL77	VLSI Lab	EC	01-Hour Instruction 02-Hour Practical	struction actical	03	09	40	100	2
8	17ECP78	Project Work Phase-I + Project work Seminar	EC		03		ı	100	100	2
		TOTAL		Theory:18 hours Practical and Project: 09 hours	hours and hours	21	420	380	800	24

Professional Elective-3	Elective-3	Professional Elective-4	ctive-4
17EC741	Multimedia Communication	17EC751	DSP Algorithms and Architecture
17EC742	Biomedical Signal Processing	17EC752	IOT and Wireless Sensor Networks
17EC743	Real Time Systems	17EC753	Pattern Recognition
17EC744	Cryptography	17EC754	Advanced Computer Architecture
17EC745	CAD for VLSI	17EC755	Satellite Communication

1. **Project Phase – I and Project Seminar:** Comprises of Literature Survey, Problem identification, Objectives and Methodology. CIE marks shall be based on the report covering Literature Survey, Problem identification, Objectives and Methodology and Seminar presentation skill.

					Credits		4	4	4	3	3	2	2	2	sters.	24										
					Total Marks		100	100	100	100	100	100	100	100	/III semes	800										
				nation	EE Marks	S	09	09	09	09	09	09	09	09	VII and V	480										
				Examination	HE Marks)	40	40	40	40	40	40	40	40	rs and /or	320										
					nration in hours	I	03	03	03	03	03	03	03	03	I semeste	24										
IAVI	(CBCS)			/Week	Practical/ gniward	P	-		1		1	2	2	2	f VI and VI	9										
, BELAG	- 19 System			Teaching Hours /Week	IsirotuT	Т	2	2	2		1	2	2		cation/s o	10										
IVERSITY	ition 2018 sed Credit r 2018 – 19			Teachin	Треогу	Г	3	3	3	3	3	-	1		uring the va	15	oct	-								
INOLOGICAL UN	Scheme of Teaching and Examination 2018 – 19 ed Education (OBE) and Choice Based Credit Sye (Effective from the academic year 2018 – 19)		VI SEMESTER		Teaching Department										To be carried out during the vacation/s of VI and VII semesters and /or VII and VIII semesters.	TOTAL	tive MP. Mini-prois	Desfectional Floating 1	oressional Elective							
VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI	Scheme of Teaching and Examination 2018–19 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2018–19)	Programme: B.E: Electronics & Communication Engineering			Course Title		Digital Communication	Embedded Systems	Microwave and Antennas	Professional Elective -1	Open Elective -A	Embedded Systems Laboratory	Communication Laboratory	Mini-project	Internship		Note PCC Professional core PEC Professional Flority OF: Onen Flority MP. Mini-project	Bar and the state of the state		Course Little	Operating System	Artificial Neural Networks	Data Structures using C++	Digital System Design Using Verilog	Nanoelectronics	Python Application Programming
		Electronics & (Course and Course code		18EC61	18EC62	18EC63	18XX64X	X\$9XX81	18ECL66	18ECL67	18ECMP68			ional core PF(Na i Sa i	TAN STRUKON	r 18XX64X						
		amme: B.E:			Cour		PCC	DCC	DCC	DEC	OEC	PCC	CC	MP	Internship		PCC. Profess			Course code under 18XX64X	41	542	543	544	545	946
		Progra			SI.		-	2	3	4	5	9	7	8	6		Note		Ç	Con	18EC641	18EC642	18EC643	18EC644	18EC645	18EC646

		Ī		tal Marks Credits	0,1.	100 3	100 3	100 3	100 3	100 3	100 2	100 2	100	ied out	00 20							
			ion	EE Marks		00 10	01 09	00 10	60 10	60 10	60 10	01 09	10	hall be carr	420 800							
			Examination	E Marks	C	40	40	40	40	40	40	40	100	ıesters, it sl	38 4							
				nration in hours	a	03	03	03	03	03	03	03	1	nd VII sen s)	21							
.VI CBCS)		-	Neek	Practical/ Drawing	Ь	1	-	1			2	2	2	ion of VI a II semesters	90							
BELAGA -19 System (0			Teaching Hours /Week	IsirotuT	T	:	1	1	-	-	2	2	1	ig the vacat VII and VI	94							
/ERSITY, ion 2018 - ed Credit 2018 – 19)			Teachin	Трестиге Треогу	Г	3	3	3	3	3	-	1	1	eleted durin acation of	15							
d Examinat Choice Base ademic year	dadoan	VII SEMESTER	11	gnidəsəT nəm718qəC	I									(If not completed during the vacation of VI and VII semesters, it shall be carried out during the vacation of VII and VIII semesters)	TOTAL		Professional Elective - 2					
VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI Scheme of Teaching and Examination 2018–19 Outcome Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic vear 2018–19)	Programme: B.E: Electronics & Communication Engineering	VII SE		Course Title		Computer Networks	VLSI Design	Professional Elective - 2	Professional Elective - 3	Open Elective -B	Computer Networks Lab	VLSI Laboratory	Project Work Phase - 1	Internship		essional Elective.	Professions	Course Title	Real Time Systems	Satellite Communication	Digital Image Processing	DSP Algorithms & Architecture
	onics & Comr			and code		18EC71	18EC72	18XX73X	18XX74X	X\$LXX81	18ECL76	18ECL77	18ECP78			ore, PEC: Profe		73X				
	mme: B.E: Electi			Course and Course code		PCC	PCC	PEC	PEC	OEC	PCC	PCC	Project	Internship		Note: PCC: Professional core, PEC: Professional Elective.		Course code under 18XX73X	11	1.7	33	7
	Prograi			SI.		1	2	3	4	5	9	7	~	6	1	Note: P		Course	18EC731	18EC732	18EC733	18FC734

					Credits		3	3	8	1	3		18									
					otal Marks	ъТ	100	100	100	100	100		200									
				Examination	EE Marks	IS	09	09	09	:	09		240									
				Exam	IE Marks	C	40	40	40	100	40		260									
					uration in hours	a	03	60	03	03	60		15									
'GAVI	n (CBCS)			rs /Week	Practical/ Drawing	P	1	:	2	2	f VI and		04									
'Y, BELA 8 – 19	lit Syster 19)			Teaching Hours /Week	IsirotuT	Τ	1	1	:	:	cation/s o I and VIII		1									
IVERSIT ation 201	used Cree			Teac	Тћеогу Гестиге	Т	3	3		-	ing the va and /or VI		90			4						
LOGICAL UN g and Examin	and Choice Ba		VIII SEMESTER		Teaching Department	I					Completed during the vacation/s of VI and VII semesters and /or VII and VIII	semesters.)	TOTAL			Professional Elective - 4						
VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI Scheme of Teaching and Examination 2018–19	Outcome Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2018 – 19)	Programme: B.E. Electronics & Communication Engineering	IIIA		Course Title		Wireless and Cellular Communication	Professional Elective - 4	Project Work Phase - 2	Technical Seminar	Internship				Note: PCC: Professional Core, PEC: Professional Elective.	Profes	Course Title	Network Security	Micro Electro Mechanical Systems	Radar Engineering	Optical Communication Networks	Biomedical Signal Processing
		ctronics & Co			e and e code		18EC81	X28XX81	18ECP83	18ECS84	18ECI85				1 Core, PEC: 1							
		mme: B.E: Ele			Course and Course code		PCC	PEC	Project	Seminar	Internship			,	CC: Professiona		Course code under 18XX82X	21	22	23	24	25
		Progra			SI. No		1	2	3	4	5				Note: I		Course	18EC82	18EC822	18EC823	18EC824	18EC825

Scheme of Teaching and Examination 2018 – 19

Outcome Based Education(OBE) and Choice Based Credit System (CBCS)

	(Effective from the academic	<u>year 2018 – 1</u>	У,
W CELEBORED			

					Teachi	ng Hours	/Week		Exami	nation		
Sl. No	Course and Course code		Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	Т	P				I	
1	PCC	18 EE61	Control Systems	EEE	3	2		03	40	60	100	4
2	PCC	18 EE62	Power System Analysis – 1	EEE	3	2		03	40	60	100	4
3	PCC	18 EE63	Digital Signal Processing	EEE	3	2		03	40	60	100	4
4	PEC	18 EE64X	Professional Elective -1	EEE	3			03	40	60	100	3
5	OEC	18 EE65X	Open Elective -A	EEE	3			03	40	60	100	3
6	PCC	18 EEL66	Control System Laboratory	EEE		2	2	03	40	60	100	2
7	PCC	18 EEL67	Digital Signal Processing Laboratory	EEE		2	2	03	40	60	100	2
8	MP	18 EEMP68	Mini-project		-		2	03	40	60	100	2
9	Internship		Internship	To be carri		ring the	vacation/s	of VI ar	d VII se	mesters	and /or	VII
				TOTAL	15	10	06	24	320	480	800	24

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project.

	Professional Elective -1							
Course code under18XX64X	Course Title							
18 EE641	Introduction to Nuclear Power							
18 EE642	Electrical Engineering Materials							
18 EE643	Computer Aided Electrical Drawing							
18 EE644	Embedded System							
18 EE645	Object Oriented Programming using C++							
18EE646	Electric Vehicles Technologies							
18EE647	Sensors and Transducers							

Open Elective -A

Students can select any one of the open electives offered by other Departments expect those that are offered by the parent Department (Please refer to the list of open electives under 18XX65X).

Selection of an open elective shall not be allowed if,

The candidate has studied the same course during the previous semesters of the programme.

The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.

A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Advisor/Mentor.

Mini-project work:

Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary Mini-project can be assigned to an individual student or to a group having not more than 4 students.

CIE procedure for Mini-project:

(i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the Mini-project work, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all the guides of the college. The CIE marks awarded for the Mini-project, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Mini-project:

- (i) Single discipline: Contribution to the Mini-project and the performance of each group member shall be assessed individually in the semester end examination (SEE) conducted at the department.
- (ii) Interdisciplinary: Contribution to the Mini-project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.

Internship: All the students admitted to III year of BE/B.Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not take-

Scheme of Teaching and Examination 2018 - 19

Outcome Based Education(OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2018 – 19)

VIII SEMESTER

VIII S	CMICSIEK		1									
					Teachi	ing Hours	/Week		Exami	ination		
SI. No	Course code		Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P					
1	PCC	18EE81	Power System Operation and Control	EEE	3			03	40	60	100	3
2	PEC	18EE82X	Professional Elective - 4	EEE	3			03	40	60	100	3
3	Project	18EEP83	Project Work Phase - 2				2	03	40	60	100	8
4	Seminar	18EES84	Technical Seminar				2	03	100		100	1
5 Internship 18EEI85 Internship					esters and		ion/s of VI and nd VIII	03	40	60	100	3
	•	•		TOTAL	06		04	15	260	240	500	18

Note: PCC: Professional Core, PEC: Professional Elective.

Professional Electives - 4	
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Course code	Course Title
under 18XX82X	
18EE821	FACTs and HVDC Transmission
18EE822	Electrical Estimation and Costing
18EE823	Big Data Analytics in Power Systems
18EE824	Power System Planning
18EE825	Electrical Power Quality

Project Work

CIE procedure for Project Work Phase - 2:

(i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable.

The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Project Work Phase - 2:

(i) Single discipline: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department.

ii) Interdisciplinary: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.

Internship: Those, who have not pursued /completed the internship, shall be declared as fail and have to complete during subsequent University examination after satisfying the internship requirements.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

Activity points of the students who have earned the prescribed AICTE activity Points shall be sent the University along with the CIE marks of 8th semester. In case of students who have not satisfied the AICTE activity Points at the end of eighth semester, the column under activity Points shall be marked NSAP (Not Satisfied Activity Points).

Scheme of Teaching and Examination 2018 – 19

Outcome Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2018 – 19)

VI SEMESTER Teaching Hours / Week Examination												
					Teachi	ng Hours	/Week		Exami	ination		
Sl. No		ourse and urse code	Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P	" '				ĺ
1	PCC	18IS61	File Structures	CS / IS	3	2		03	40	60	100	4
2	PCC	18IS62	Software Testing	CS / IS	3	2		03	40	60	100	4
3	PCC	18CS63	Web Technology and its applications	CS / IS	3	2		03	40	60	100	4
4			Professional Elective -1	CS / IS	3			03	40	60	100	3
5	OEC	18CS65X	Open Elective –A	CS / IS	3			03	40	60	100	3
6	PCC	18ISL66	Software Testing Laboratory	CS / IS		2	2	03	40	60	100	2
7	PCC	18ISL67	File Structures Laboratory with mini project	CS / IS		2	2	03	40	60	100	2
8	MP	18ISMP68	Mobile Application Development	CS / IS			2	03	40	60	100	2
9	INT	(To be carrintervening semesters)	g vacation:									
			·	TOTAL	15	10	06	24	320	480	800	24

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project, INT: Internship.

Professional Elective -1							
Course code under18XX64X	Course Title						
18CS641	Data Mining and Data Warehousing						
18CS642	Object Oriented Modelling and Design						
18CS643	Cloud Computing and its Applications						
18CS644	Advanced JAVA and J2EE						
18IS645	Information Management System						
	Open Elective –A (Not for CSE / ISE Programs)						
18CS651	Mobile Application Development						
18CS652	Introduction to Data Structures and Algorithms						
18CS653	Programming in JAVA						
18CS654	Introduction to Operating System						

Students can select any one of the open electives offered by any Department(Please refer to the list of open electives under 18CS65X). Selection of an open elective is not allowed provided,

- The candidate has studied the same course during the previous semesters of the programme.
- The syllabus content of open elective is similar to that of Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the programme.

Registration to electives shall be documented under the guidance of Programme Coordinator/ Adviser/Mentor.

Mini-project work: Based on the ability/abilities of the student/s and recommendations of the mentor, a single discipline or a multidisciplinary Mini- project can be assigned to an individual student or to a group having not more than 4 students.

CIE procedure for Mini-project:

- (i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide. The CIE marks awarded for the Mini-project work, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.
- (ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all the guides of the college. The CIE marks awarded for the Mini-project, shall be based on the evaluation of project report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Mini-project:

- (i) Single discipline: Contribution to the Mini-project and the performance of each group member shall be assessed individually in the semester end examination (SEE) conducted at the department.
- (ii) Interdisciplinary: Contribution to the Mini-project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.

Internship: All the students admitted to III year of BE/B. Tech shall have to undergo mandatory internship of 4 weeks during the vacation of VI and VII semesters and /or VII and VIII semesters. A University examination shall be conducted during VIII semester and the prescribed credit shall be included in VIII semester. Internship shall be considered as a head of passing and shall be considered for the award of degree. Those, who do not takeup/complete the internship shall be declared fail and shall have to complete during subsequent University examination after satisfying the internship requirements

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card.

Scheme of Teaching and Examination 2018 - 19

Outcome Based Education (OBE) and Choice Based Credit System (CBCS) (Effective from the academic year 2018 – 19)

VIII S	SEMESTEI	R										
					Teaching Hours /Week			Examination				
SI. No	Course and Course code		Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P)		Ĺ	
1	PCC	18CS81	Internet of Things	CS / IS	3			03	40	60	100	3
2	PEC	18CS82X	Professional Elective – 4	CS / IS	3			03	40	60	100	3
3	Project	18CSP83	Project Work Phase – 2	CS / IS			2	03	40	60	100	8
4	Seminar	18CSS84	Technical Seminar	CS / IS			2	03	100		100	1
5	INT	18CSI85	Internship	(Completed during the intervening vacations of VI and VII semesters and /or VII and 03 40 60				100	3			

Note: PCC: Professional Core, PEC: Professional Elective, OEC: Open Elective, INT: Internship.

	Professional Electives – 4						
Course code under 18CS82X	Course Title						
18CS821	Mobile Computing						
18CS822	Storage Area Networks						
18CS823	NoSQL Database						
18CS824	Multicore Architecture and Programming						

VIII semesters.)
TOTAL 06

15

260

240

500

18

Project Work CIE procedure for Project Work Phase - 2:

- (i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide. The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.
- (ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable. The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Project Work Phase - 2:

- (i) Single discipline: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department.
- (ii) Interdisciplinary: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belong to.

Internship: Those, who have not pursued /completed the internship shall be declared as fail and have to complete during subsequent University examination after satisfying the internship requirements

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card. Activity points of the students who have earned the prescribed AICTE activity Points shall be sent the University along with the CIE marks of 8th semester. In case of students who have not satisfied the AICTE activity Points at the end of eighth semester, the column under activity Points shall be marked NSAP (Not Satisfied Activity Points).



VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI B.E. In MECHATRONICS

Scheme of Teaching and Examination 2018 – 19
Outcome Based Education(OBE) and Choice Based Credit System (CBCS)
(Effective from the academic year 2018 – 19)

VI SEMESTER

					Teach	ing Hou	rs /Week		Exam	nination		
SI. N o	Cou and Cou code	rse	Course Title	Teaching Departmen t	Theor	Tutorial	Practica /	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P					
1	PCC	18 MT61	PLC & SCADA		3	2		03	40	60	100	4
2	PCC	18 MT62	Power Electronics		3	2		03	40	60	100	4
3	PCC	18 MT63	Computer Aided Machine Drawing		1	0	4	03	40	60	100	4
4	PEC	18 MT64X	Professional Elective -1		3		-	03	40	60	100	3
5	OEC	18XX65X	Open Elective –A		3		-	03	40	60	100	3
6	PCC	18 MTL66	PLC and SCADA- Laboratory			2	2	03	40	60	100	2
7	PCC	18 MTL67	Power electronics - Laboratory			2	2	03	40	60	100	2
8	MP	18MTM,P68	Mini-project				2	03	40	60	100	2
9	Internship		Internship	To be carried out during the vacation/s of VI and VII semesters and /or VII							VII	
				and VIII se	emesters.		1					
				TOTAL	13	08	10	24	320	480	800	24

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project.

	Professional Elective -1								
Course code under	Course Title								
18MT64X									
18 MT641	Modeling And Simulation								
18 MT642	Rapid Prototyping								
18 MT643	Artificial neural network								
18 MT644	Satellite Communication								
18 MT645	Computer Integrated Manufacturing								
	Open Elective –A								

18 MT651 Robotics and Automation, 18 MT652 Process Instrumentation

Students can select any one of the open electives offered by other Departments except those that are offered by the parent Department (Please refer to the list of open electives under 18XX65X).

Selection of an open elective shall not be allowed if,

- The candidate has studied the same course during the previous semesters of the program.
- The syllabus content of open elective is similar to that of the Departmental core courses or professional electives.
- A similar course, under any category, is prescribed in the higher semesters of the program

Registration to electives shall be documented under the guidance of Program Coordinator/ Advisor/Mentor.

VISVESVARAYA TECHNOLOGICAL UNIVERSITY, BELAGAVI **B.E. In MECHATRONICS**

Scheme of Teaching and Examination 2018 – 19

Outcome Based Education(OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2018 – 19) VIII SEMESTER

	Teach	ing Hou	ırs	
	/Week			

					Teaching Hours /Week							
SI. N o	Cou and Cou code	rse	Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P			<i>S</i> 2	Н	
1	PCC	18MT81	Automotive Electronics & Hybrid Vehicles		4			03	40	60	100	3
2	PEC	18MT82X	Professional Elective - 4		3			03	40	60	100	3
3	Project	18MTP83	Project Work				2	03	40	60	100	8
4	Seminar	18MTS84	Technical Seminar				2	03	100		100	1
5	Internship	18MTI85	Internship	of VI an	Completed during the vacation/s of VI and VII semesters and /or VII and VIII semesters.)			03	40	60	100	3
	TOTAL						04	15	260	240	500	18

Note: PCC: Professional Core, PEC: Professional Elective.

Professional Electives - 4						
Course code under 18XX82X	Course Title					
18 MT821	Operation Research.					
18 MT822	Communication system					
18 MT823	Digital Control System					
18 MT824	Management Information Systems					
18 MT825	Radar Engineering					

Project Work

CIE procedure for Project Work Phase - 2:

(i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable.

The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Project Work Phase - 2:

- (i) Single discipline: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department.
- (ii) Interdisciplinary: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belongs to.

Internship: Those, who have not pursued /completed the internship, shall be declared as fail and have to complete during subsequent University examination after satisfying the internship requirements.

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Scheme of Teaching and Examination 2018 – 19

Outcome Based Education(OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2018 – 19)

VI SEMESTER

					Teachi	ng Hour	s/Week		Exam	ination		
Sl. No	Course and Course code		Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P			••	1	
1	PCC	18ME61	Finite Element Methods		3	2		03	40	60	100	4
2	PCC	18ME62	Design of Machine Elements II		3	2		03	40	60	100	4
3	PCC	18ME63	Heat Transfer		3	2		03	40	60	100	4
4	PEC	18ME64X	Professional Elective -1		3			03	40	60	100	3
5	OEC	18ME65X	Open Elective -A		3			03	40	60	100	3
6	PCC	18MEL66	Computer Aided Modelling and Analysis Lab			2	2	03	40	60	100	2
7	PCC	18MEL67	Heat Transfer Lab			2	2	03	40	60	100	2
8	MP	18MEMP68	Mini-project				2	03	40	60	100	2
9	Internship		Internship	To be carried out during the vacation/s of VI and VII semesters and /or VII and VIII semesters.								or VII
	TOTAL 15 10 06 24 320 480 800 24											

Note: PCC: Professional core, PEC: Professional Elective, OE: Open Elective, MP: Mini-project.

	Professional Elective -1										
Course code under	de under Course Title Course code under Course Title										
18XX64X		18XX64X									
18ME641	Non-Traditional Machining	18ME644	Vibrations and Noise Engineering								
18ME642	Refrigeration and Air conditioning	18ME645	Composite Materials Technology								
18ME643	Theory of Elasticity	18ME646	Entrepreneurship Development								
		Open Elective -A	-								

Students can select any one of the open electives offered by other Departments expect those that are offered by the parent Department (Please refer to the list of open electives under 18XX65X).

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- A similar course, under any category, is prescribed in the higher semesters of the programme.

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Mini-project work:

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Scheme of Teaching and Examination 2018 – 19

Outcome Based Education(OBE) and Choice Based Credit System (CBCS)

(Effective from the academic year 2018 - 19)

VIII	SEMESTER	

					Teac	hing Ho	Teaching Hours /Week			ination		
SI. No		rse and rse code	Course Title	Teaching Department	Theory Lecture	Tutorial	Practical/ Drawing	Duration in hours	CIE Marks	SEE Marks	Total Marks	Credits
					L	T	P					
1	PCC	18ME81	Energy Engineering		3			03	40	60	100	3
2	PEC	18ME82X	Professional Elective - 4		3			03	40	60	100	3
3	Project	18MEP83	Project Work Phase - 2				2	03	40	60	100	8
4	Seminar	18MES84	Technical Seminar				2	03	100		100	1
5	Internship	18XXI85	Internship	of VI ar	pleted during the vacation/s I and VII semesters and /or and VIII semesters.)			03	40	60	100	3
				TOTAL	06		04	15	260	240	500	18

Note: PCC: Professional Core, PEC: Professional Elective.

-	e • 1	100	4
Pro	tessional	Electives	- 4

Course code under 18XX82X	Course Title	Course code under 18XX82X	Course Title
18ME821	CNC Machine Tools	18ME824	Automobile Engineering
18ME822	Tribology	18ME825	Tool Design
18ME823	Non-Destructive Testing and Evaluation	18ME826	Fracture Mechanics

Project Work

CIE procedure for Project Work Phase - 2:

(i) Single discipline: The CIE marks shall be awarded by a committee consisting of the Head of the concerned Department and two senior faculty members of the Department, one of whom shall be the Guide.

The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

(ii) Interdisciplinary: Continuous Internal Evaluation shall be group wise at the college level with the participation of all guides of the college. Participation of external guide/s, if any, is desirable.

The CIE marks awarded for the project work phase -2, shall be based on the evaluation of project work phase -2 Report, project presentation skill and question and answer session in the ratio 50:25:25. The marks awarded for the project report shall be the same for all the batch mates.

SEE for Project Work Phase - 2:

- (i) Single discipline: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted at the department.
- (ii) Interdisciplinary: Contribution to the project and the performance of each group member shall be assessed individually in semester end examination (SEE) conducted separately at the departments to which the student/s belongs to.

Internship: Those, who have not pursued /completed the internship, shall be declared as fail and have to complete during subsequent University examination after satisfying the internship requirements.

AICTE activity Points: In case students fail to earn the prescribed activity Points, Eighth semester Grade Card shall be issued only after earning the required activity Points. Students shall be admitted for the award of degree only after the release of the Eighth semester Grade Card. Activity points of the students who have earned the prescribed AICTE activity Points shall be sent the University along with the CIE marks of 8th semester. In case of students who have not satisfied the AICTE activity Points at the end of eighth semester, the column under activity Points shall be marked NSAP (Not Satisfied Activity Points).

III Semester (III Semester (Core Specialization)	ion)									
			A.10	Teac	Teaching hours per week	2		Marks for	s for		
	Subject Code		gəteO	11.6		ľ	To no noitei	2	Ξ	Total Mark	stibə.
Marketing	Finance	Human Resource	Course	прээд	Ргастіся Сотро	stoT	Duratio Examin hours	CIF	SEI	s	CI
18MBAMM301 Consumer Behavior	18MBAFM301 Banking and Financial Services	18MBAHR301 Recruitment & Selection	Elective	3	2	S	3	40	09	100	4
18MBAMM302 Retail Management	18MBAFM302 Investment Management	18MBAHR302 HR Analytics	Elective	ω.	2	S	8	40	09	100	4
18MBAMM303 Services Marketing	18MBAFM303 Direct Taxation	18MBAHR303 Compensation & Reward System	Elective		2	2	8	94	09	100	4
18MBAMM304 Marketing Research& Analytics	18MBAFM304 Advanced Financial Management	18MBAHR304 Learning & Development	Elective	3	2	S	6	40	09	100	4
18MBAMM305 Business Marketing	18MBAFM305 Cost Management	18MBAHR305 Industrial Relations & Legislations	Elective	3	2	S	69	40	09	100	4
18MBAMM306 Supply Chain Management	18MBAFM306 Project Appraisal Planning & Control	18MBAHR306 Conflict & Negotiation Management	Elective	6	2	S	33	40	09	100	4
18MBAOS307 OrganizationStudy Industrial Visit	ganizationStudy		Core	0	8	∞ :		40	09	100	4
managinal violi			Total	: 2	20	: 25	1 1	280	420	- 00/	. 58

Not

1. Each Course has a theory component of 3hrs (3credits) and a Practical component of 2hrs (1credit). The Time-Table allotment

for each course should be (3+2) = 5hours.

2. For the practical component, it is mandatory to maintain a practical record

3.20% of marks should be allocated for application oriented questions in the SEE Question Paper, based on practical component.

3. LV* or marks should be anocated for application oriented questions in the SEE. Question Paper, based on practical component.
4. Organization Study (Four Weeks) will be carried out by students after second semester during vacation and the report submitted by the students will be assessed internally during the third semester.

5.One Industrial Visit per Semester is Mandatory. The Department shall insist on report submission by each student and shall

maintain this as a documentary proof. Theformat of the report shall be prescribed by the department.

6.Course instructors are free to set the Course outcome and map with the Programme Outcome, subsequently attainment level may

be calculated.

Marks 2 2 e 9 9 Mckensy's 7S framework and Porter's Five Force Understanding the Corporate Functions/Company Rubrics for Viva voce Examination Aspects Total inancial statement analysis 20 Understanding the Industry 20 Communication skill carning experience Overall presentation SWOT analysis offle Marks 100 09 Total Assessment by the Guide-Interaction with the student Viva-Voce Examination to be conducted by the Guide and an External examiner from the Industry/Institute Rubrics for Organization Study Report Evaluation by the Guide SEE Œ

		Total Marks			100			100			100			100			100			00		100	1
	for	3	SEI		09			99			09			09			09			09		99	;
	Marks for		CIE		40			40			40			40			40			40		40	
	sano		Duratio Examin		33			co			3			33			3			3		1	1
	simi	I	rtoT		S			2			5			S			S			S		∞	1
	Teaching hours per week		Practi Compo		7			7			7			7			7			7		∞	1
	Teac	r.e	прээД		3			3			3			3			3			3		1	1
	Æ.	លេខ១វន ៍) serno)		Elective			Elective			Elective			Elective			Elective			Elective		Core	Core
(uc			HR & Marketing	18MBAHR301	Recruitment &	Selection	18MBAHR302	HR Analytics		18MBAHR303	Compensation &	Reward System	18MBAMM301	Consumer	Behavior	18MBAMM302	Retail	Management	18MBAMM303	Services	Marketing		
III Semester (Dual Specialization)	Subject Code	ano mafano	Finance & HR	18MBAFM301	Banking and	FinancialServices	18MBAFM302	Investment	Management	18MBAFM303	Direct Taxation		18MBAHR301	Recruitment &	Selection	18MBAHR302	HR Analytics		18MBAHR303	Compensation &	Reward System	anization study	
III Semester (I			Marketing & Finance	18MBAMM301	Consumer	Behavior	18MBAMM302	Retail	Management	18MBAMM303	Services	Marketing	18MBAFM301	Banking and	FinancialServices	18MBAFM302	Investment	Management	18MBAFM303	Direct Taxation		18MBAOS307 Organization study	Industrial Visit

Credits

Note:

1. Each Course has a theory component of 3hrs (3credits) and a Practical component of 2hrs (1credit). The Time-Table allotment for each course should be (3+2) = 5hours.

- 280 420

2. For the practical component, it is mandatory to maintain a practical record.

3.20% of marks should be allocated for application oriented questions in the SEE Question Paper, based on practical component.

4.0rganization Study (Four Weeks) will be carried out by students after second semester during vacation and the report submitted

by the students will be assessed internally during the third semester.

5.One Industrial Visit per Semester is Mandatory. The Department shall insist on report submission by each student and shall maintain this as a documentary proof. Theformat of the report shall be prescribed by the department.

 6. Course instructors are free to set the Course outcome and map with the Programme Outcome, subsequently attainment level may be calculated.

		1		
	Rubrics for Organization Study		Rubrics for Viva voce Examination	
	Particulars	Marks	Aspects	Marks
CIE Assessme	Assessment by the Guide- Interaction with the student	70	20 Communication skill	2
Report E	Report Evaluation by the Guide	70	Understanding the Industry	S
Viva-Voc	Viva-Voce Examination to be conducted by the Guide	09	Understanding the Corporate Functions/Company	10
and an Ex	and an External examiner from the Industry/Institute		profile	
	Total	100	100 Mckensy's 7S framework and Porter's Five Force	10
			Model	
			SWOT analysis	10
			Financial statement analysis	10
			Learning experience	S
			Overall presentation	2
			Total	09
				Ì





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IV Semester (Dual Specialization)

Credits

Total Marks

SEE

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ı	33
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^{1.} Course instructors are free to set the Course outcome and map with the Programme Outcome, subsequently attainment level may

SALES Prinance & HR		Subject Code		Caory.	Teac	Teaching hours per week	ars		Marks for	s for		
Finance & HR HR & Marketing Corporate HR & Marketing Elective Social IsMBAHR401 IsMBAHR402 IsMBAHR402 IsMBAHR403		ann) malance		se Cat	r.e		I	itanin	5	3	Total Marks	saj
Hambar H	Marketing & Finance	Finance & HR	HR & Marketing	Cour	проэД		въоТ	Ехві	CIE	EE		Credi
House ISMBAFIN402 ISMBAFIN402 ISMBAFIN402 ISMBAFIN402 ISMBAFIN403 ISMBAFIN403 ISMBAFIN403 ISMBAFIN403 ISMBAFIN4040 ISMBAFINA4040 ISMBAFIN4040 ISM	18MBAMM401 Sales Management	18MBAFM401 Mergers, Acquisitions& Corporate Restructuring	18MBAHR401 Public Relations	Elective	E.	ı		т го	40	09	100	ε.
Social Indirect Taxation International Human Resource Human Resource Elective 3	18MBAMM402 Integrated Marketing Communication	18MBAFM402 Risk Management and Insurance	18MBAHR402 Organizational Leadership	Elective	33	1	33	60	40	09	100	m
18MBAHR401 18MBAMM401 18mBAMM401 18mBAHR402 2ales	18MBAMM403 Digital and Social Media Marketing	18MBAFM403 Indirect Taxation	18MBAHR403 International Human Resource Management	Elective	ε.	ı	33	ro.	40	09	100	6
18MBAHR402 18MBAMM402 18mBAMM402 18mBAHR402 18mBAHR402 18mBAHR403 18m	18MBAFM401 Mergers, Acquisitions & Corporate Restructuring	18MBAHR401 Public Relations	18MBAMM401 Sales Management	Elective	3	1	3	3	40	09	100	3
18MBAHR403 18MBAMM403 18mBAM403 18mBAM	18MBAFM402 Risk Management and Insurance	18MBAHR402 Organizational Leadership	18MBAMM402 Integrated Marketing Communication	Elective	m	ı	33	33	40	09	100	т
Project Work Core 12 12 12 40 60 100 Core Total 18 12 30 28 420 700	18MBAFM403 Indirect Taxation	18MBAHR403 International Human Resource Management	18MBAMM403 Digital and Social Media Marketing	Elective	3	ı	3	3	40	09	100	33
Core <td>18MBAPR407Proje</td> <td>ect Work</td> <td></td> <td>Core</td> <td>:</td> <td>12</td> <td>12</td> <td>1</td> <td>40</td> <td>09</td> <td>100</td> <td>9</td>	18MBAPR407Proje	ect Work		Core	:	12	12	1	40	09	100	9
18 12 30 - 280 420 700	Industrial Visit			Core	1	;	;	;	:	1	1	1
				Total	18	12	30		280	450	200	24

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1

Elective

Management 18MBAHR404 Organization

18MBAFM404 International

Marketing 18MBAMM404 Strategic Brand

Social Media

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2. Project work(Six Weeks) will be carried out after third semester and shall be evaluated during fourth semester.

LCourse instructors are free to set the Course outcome and map with the Programme Outcome, subsequently attainment level may be calculated.

Project work(Six Weeks) will be carried out after third semester and shall be evaluated during fourth semester