



Chhattisgarh Swami Vivekanand Technical University, Bhilai (CG)

Scheme for B. Tech. First Semester (Robotics and AI 3150)

S.No.	Board of Studies (BOS)	Courses (Subject)	Subject Code	Course Category	Period per Week			Scheme of Examination			Total Marks	Credits	Assessment/ assignment hours per week	Teaching Hours/sem
					L	T	P	Theory/Lab						
								ESE	CT	TA				
1.	Applied Mathematics	Engineering Mathematics-1	3000A02AT014	BFC-BSC	3	1		100	20	20	140	4	1	60
2.	Applied Physics	Engineering Physics (Non Circuit)	3000A04AT015	BFC-BSC	3	-	-	100	20	20	140	3	1	45
3.	Electrical Engineering	Basic Electrical Engineering	3000A05AT024	BFC-ESC	3	-	-	100	20	20	140	3	1	45
4.	Mechanical	Fundamentals of Mechanical Engineering	3037A01CT037	SBS-PCC	3	1	-	100	20	20	140	4	1	60
5.	Humanities	Professional Communication Skills	3000A06DT046	AEC-HSMC	2		-	50	10	10	70	2	1	30
6.	Humanities	Foundation course on Ancient Indian Knowledge System	3000A07ET046	IKS	2	-	-	50	10	10	70	2	1	30
7.	Computer Science Engineering	Fundamentals of Computer & IT Lab	3000A02CL022	SBS-ESC	-	-	4	40	-	20	60	2	1	60
8.	Mechanical	Fundamentals of Mechanical Engineering (Lab)	3037A01CL037	SBS-PCC	-	-	2	40	-	20	60	1	-	30
9.	Applied Physics	Engineering Physics Lab (Non Circuit)	3000A04AL015	BFC-BSC	-	-	2	40	-	20	60	1	-	30
10.	Electrical Engineering	Basic Electrical Engineering Lab	3000A05AL024	BFC-ESC	-	-	2	40	-	20	60	1	-	30
11.	Humanities	Sports & Yoga	3000A06FL046	VAC-MNC AU	-	-	2	-	-	30	30	-	-	30
12.	Humanities	Social Service/Community Services	3000A07FL046	VAC-MNC AU	-	-	2	-	-	30	30	-	-	30
13.		Library				1								15
Total					16	3	14	660	100	240	1000	23	105	495
Total Learning Hours/Semester													600	

L-Lecture, P-Practical, ESE-End semester Exam, CT-Class Test, TA-Teacher's Assessment

Note: Abbreviations of Course category

BFC- Basics Foundation Course

SBS- Skilled Based Subject (Branch Specific)

IKS- Indian Knowledge System

AEC- Ability Enhancement Course

VAC- Value Added Course

BSC- Basic Science Courses

ESC- Engineering Science Courses

PCC- Professional Core Courses

HSMC- Humanities, Social Sciences & Management Courses

MNC AU-Mandatory Non Credit Courses – Audit Course



Chhattisgarh Swami Vivekanand Technical University, Bhilai (CG)

Scheme for B. Tech. Second Semester (Robotics and AI 3150)

Sl. No.	Board of Studies (BOS)	Courses (Subject)	Subject Code	Course Category	Period per Week			Scheme of Examination			Total Marks	Credits	Assessment/assignment hours per week	Teaching Hours
					L	T	P	Theory/Lab						
								ESE	CT	TA				
1.	Applied Mathematics	Engineering Mathematics-II	3000B02AT014	BFC-BSC	3	1	-	100	20	20	140	4	2	60
2.	Mechanical	Smart Manufacturing	3037B01CT037	SBS-PCC	3	-	-	100	20	20	140	3	2	45
3.	Applied Chemistry	Environmental Chemistry	3000B03AT011	BFC-BSC	3	-	-	100	20	20	140	3	2	45
4.	Computer Science Engineering	Concepts of Programming Language	3000B04AT022	BFC-ESC	3	-	-	100	20	20	140	3	1	45
5.	Humanities	Indian Culture and Constitution	3000B05ET046	IKS	2	-	-	50	10	10	70	2	1	30
6.	Management	Cyber Law and Ethics	3000B09FT076	VAC	1	-	-	50	10	10	70	1	1	15
7.	Computer Science Engineering	Concepts of Programming Language (Lab)	3000B02AL022	BFC-ESC	-	-	2	40	-	20	60	1	1	30
8.	Mechanical Engineering	Engineering Graphics (Lab)	3000B03AL037	BFC-BSC	-	-	4	40	-	20	60	2	1	60
9.	Applied Chemistry	Environmental Chemistry (Lab)	3000B04AL011	BFC-BSC	-	-	2	40	-	20	60	1	-	30
10.	Mechanical	Smart Manufacturing (Lab)	3037B01CL037	SBS-PCC	-	-	2	40	-	20	60	1	-	30
11.	Humanities	Value Education	3000B07FT046	VAC-MNCAU	1	-	-	-	-	30	30	-	-	15
12.	Civil Engineering	Civil Engg-Societal and Global Impact	3000B08FT020	VAC-MNCAU	1	-	-	-	-	30	30	-	-	15
13.		Library				1								15
Total					17	2	10	660	100	240	1000	21	165	435
Total Learning Hours/semester													600	

L-Lecture, P-Practical, ESE-End semester Exam, CT-Class Test, TA-Teacher's Assessment

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BFC- Basics Foundation Course

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MNC AU-Mandatory Non Credit Courses – Audit Course



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI (C.G.)

Scheme of Teaching and Examination

Scheme for B.Tech Third Semester (Robotics and Artificial Intelligence-3150)

Sl. No.	Board of Studies (BOS)	Courses (Subject)	Subject Code	Course Category	Period per Week			Scheme of Examination			Total Marks	Credits	Teaching Hours/sem	Assessment hours/sem (Assignment/ Practical file)
					L	T	P	Theory/Lab						
								ESE	CT	TA				
1	Applied Mathematics	Engineering Mathematics-III	3000C01AT014	BFS-BSC	2	1	-	100	20	20	140	3	45	15
2	Mechanical Engineering	Basics of Robotics & Artificial Intelligence	3150C02BT037	PCC	2	1	-	100	20	20	140	3	45	15
3	Electronics Telecommunication Engineering	Analog and Digital Electronics	3150C03BT028	PCC	2	1	-	100	20	20	140	3	45	15
4	Electrical Engineering	Electrical Machines and Drive	3150C04CT024	SBS-PCC	2	1	-	100	20	20	140	3	45	15
5	Mechanical Engineering	Fundamentals of Material Science	3150C05CT037	SBS-PCC	2	1	-	100	20	20	140	3	45	15
6	Humanities	Life Concept by Bhagwat Gita	3000C06ET046	IKS	2	-	-	100	20	20	140	2	30	15
7	Mechanical Engineering	Robotics Programming Lab	3150C01BL037	PCC	-	-	2	40	-	20	60	1	30	15
8	Electronics Telecommunication Engineering	Analog and Digital Electronics Lab	3150C02BL028	PCC	-	-	2	40	-	20	60	1	30	15
9	Mechanical Engineering	Material Science Lab	3150C03CL037	SBS-PCC	-	-	2	40	-	20	60	1	30	15
10	Mechanical Engineering	Idea Innovation Lab	3150C04FL037	VAC		-	2	-	-	40	40	1	30	15
11	Management	Personality Development	3000C07DT076	AEC-MNC AU	1		2			40	40	-	45	15
12		Library				1		-	-	-	-	-	15	-
Total					13	6	10	720	120	260	1100	21	435	165
Total Learning Hours/Semester													600	

L- Lecture, P- Practical, ESE- End Semester Exam, CT- Class Test, TA- Teacher Assessment

Note: Abbreviations of Course category

BFS Basics Foundation Subject

BSC Basic Science Courses

PCC Professional Core Courses

VAC Value Added Course

SBS Skilled Based Subject (Branch Specific)

IKS Indian Knowledge System

AEC Ability Enhancement Course

MNC AU Mandatory Non Credit Courses – Audit Course



CHHATTISGARH SWAMI VIVEKANAND TECHNICAL UNIVERSITY, BHILAI (C.G.)

Scheme of Teaching and Examination

Scheme for B.Tech Fourth Semester (Robotics and Artificial Intelligence-3150)

Sl. No.	Board of Studies (BOS)	Courses (Subject)	Subject Code	Course Category	Period per Week			Scheme of Examination			Total Marks	Credits	Teaching Hours	Assessment hours/sem (Assignment /Practical file)
					L	T	P	Theory/Lab						
								ESE	CT	TA				
1	Mechanical Engineering	Kinematics of Machines	3150D01BT037	PCC	3	1	-	100	20	20	140	4	60	15
2	Mechanical Engineering	Instrumentation and Control System	3150D02BT037	PCC	3	1	-	100	20	20	140	4	60	15
3	Computer Science Engineering	Artificial Intelligence and Machine Learning	3150D03BT022	PCC	3	1	-	100	20	20	140	4	60	15
4	Mechanical Engineering	Computer Aided Manufacturing	3037D04CT037	SBS-PCC	2	1	-	100	20	20	140	3	45	15
5	Computer Science Engineering	Natural Language Programming (Python)	3150D05BT022	PCC	1	1		100	20	20	140	2	30	15
6	Humanities	Indian Traditional Knowledge: Science & Practices	3000D06ET046	IKS	2	-	-	50	10	10	70	2	30	10
7	Mechanical Engineering	Kinematics of Machines Lab	3150D01BL037	PCC	-	-	2	40	-	20	60	1	30	10
8	Mechanical Engineering	Instrumentation and Control System Lab	3150D02BL037	PCC	-	-	2	40	-	20	60	1	30	10
9	Computer Science Engineering	Natural Language Programming (Python)Lab	3150D03BL022	PCC	-	-	2	40	-	20	60	1	30	10
10	Mechanical Engineering	Computer Aided Manufacturing Lab	3150D04CL037	SBS-PCC	-	-	2	40	-	20	60	1	30	10
11	Management	Entrepreneurship Development and Startups	3000D07DT076	AEC-MNC AU	2	-	-	-	-	50	50	-	30	10
12	Humanities	Emotional Intelligence and Social Learning	3000D08FT046	VAC-MNC AU	1	-	-	-	-	40	40	-	15	-
13	-	Library	-		-	1	-	-	-		-	-	15	-
Total					17	6	8	710	110	280	1100	23	465	135
Total Learning Hours/semester														600

L- Lecture, P- Practical, ESE- End Semester Exam, CT- Class Test, TA- Teacher Assessment

Note: Abbreviations of Course category

BFS Basics Foundation Subject

BSC Basic Science Courses

PCC Professional Core Courses

VAC Value Added Course

SBS Skilled Based Subject (Branch Specific)

IKS Indian Knowledge System

AEC Ability Enhancement Course

MNC AU Mandatory Non Credit Courses – Audit Course