B.Tech in Biomedical Engineering

Proposed draft Curriculum

	Course code CY1018	Course name Environmental Chemistry	Category BS	Credits	Prereq None			Course code ME1020	Course name Engineering Mechanics	Category BE	Credits 3	Prere Non
	EP1108 ID1063	Modern Physics Introduction to Programming	BS BS BE	2 2 3	None None			BM1030 BO1010	Bioengineering ^{es} Life Science	Core BS	2 1	Non
Sem-1	LA1760	English Communication Mathematics for Physics	SS BS	2 2 2	None None		Sem-2	EP1208 ID1054	Electricity & magnetism Digital fabrication	BS BS BE	2	Non
	MA1110 MA1220	Calculus - I Calculus - II	BS BS	1	None None			EM3020 ID1050	Introduction to Entrepreneurship Artificial intelligence	SS BE	1	Non Non
	BM1000	Physio-anatomy-I	BS	2	None			EE1102 MA1140	Basic Electrical Engineering Elementary Linear algebra	BE BS	3 1	Non Non
								MA1150	Differential equations Electives	BS	1 0	Non
			Sem Total	15						Sem Total	17	
	Course code	Course name	Category	Credits	Prereq			Course code	Course name	Category	Credits	Prere
	BM1010 BM2013	Physio-anatomy-II Analog and integrated circuits	Core Core	2	BM1000 ID <ee></ee>			BM2000 BM2003	Control systems Introduction to embedded systems	Core Core	1	Non BM201
	BM2043	Algorithms and data structures lab	Core	2	ID2230			BM2023	Basic Bioinformatics	Core	2	BM1000 BM101
Sem-3	BM2053	Mathematical models & systems biology ^{es}	Core	2	BM1000; BM1010		Sem-4	BM3030	Medical nanotech-I	Core	2	BM1000 BM101
	ID2230 MA2110	Data structures and applications Introduction to Probability	BE BS	3 1	None None			BM3090 MA2140	Biomedical imaging Introduction to Statistics	Core BS	3 1	Non Non
		Electives		2					Electives		4	
			Sem Total	15						Sem Total	16	
	Course code	Course name	Category	Credits	Prereq BM2033;			Course code	Course name	Category	Credits	Prere
	BM3000	Natural intelligence, Foundations of	Core	3	BM1000; BM1010				Internship / Electives		6	require CGP
	BM3023	Cell Technology	Core	3	BM1000; BM1010				Electives		9	
Sem-5		Introduction to Biomechanics Sensors & transducers in	Core	2	BM1000; BM1010 BM2013;		Sem-6					
	BM5013	healthcare	Core	2	BM2003 BM1000;							
	BM5090	Biomaterials-1 Linear Systems and Signal	Core BE	2 3	BM1010 None							
		Processing Electives		2						Som T	-	
			Sem Total	17						Sem Total	15	
	Course code	Course name	Category	Credits	Prereq			Course code	Course name	Category	Credits	Prere
	BM5023	Biomedical devices	Core	2	BM5013			BM4000	Regulatory processes and bioethics	Core	2	BM502 15 credit
Sem-7		Electives		15			Sem-8	BM4015	Capstone Project	Core	3	o Elective baske
								BM6246	Clinical immersion & Biodesign	Core	2	BM103 BM502
			Sem Total	17					Electives	Sem Total	9 16	
									Total (All Sems)		128	
	Summary	of Credits Core credits	43						LA / CA electives	8		
		BE credits BS credits	18 17						Free Electives Dept. Electives	9 30		
		SS credits	3						Total	128		
	<course< td=""><td>Name>°^s</td><td>Offered to I</td><td>Engineeri</td><td>ng Science</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></course<>	Name>° ^s	Offered to I	Engineeri	ng Science							
	Dept. Elec	ctive baskets										
		30* departmental electives must be at least 22 credits must come from a		et.					s opting for internship during 6th Se 24 electives of which 22 credits mus			
	The rema	ining credits may be chosen from ot	her baskets					from a sir	ngle basket			
maging	& sensing Course	Course name	Category	Credits	Prereq		aterials a	nd Nanom Course	edicine Course name	Category	Credits	Prere
	code	Robotics	IM	3				code BM3011	Medical biochemistry lab	MAT-NM	2	BM1000 BM101
	BM2033	Probability and Random Processes Medical image processing &	IM	2	MA2110			BM4001	Biomaterials Lab	MAT-NM	2	BM509
	BM4080 BM4020	analysis Biophotonics	IM IM	2 3	ID <sp> BM3090</sp>			BM4010 BM4011	Medical nanotech-II Biomicrofab lab	MAT-NM MAT-NM	2 2	BM303 BM419
	BM4021 BM5170	Medical image processing lab Ultrasound in medicine	IM IM	2 3	BM4080 BM3090			BM4190 BM5141	Biofabrication Biomaterials-2	MAT-NM MAT-NM	2 2	BM509 BM509
	BM4091	Diagnostic Imaging Lab	IM	3	ID <sp> ID;</sp>			BM4120	Tissue engg & Regenerative med	MAT-NM	3	BM509
	BM6070 CS3390	Biomicrofluidics Machine learning, Foundations of	IM IM	3 3	BM3040			BO6070 MS2050	Molecular Basis of Diseases Mechanical behavior of materials	MAT-NM MAT-NM	3 3	
								MSxxxx	Soft Materials Proc, Struct, Char & Props	MAT-NM	3	
		Elective bucket total		24					Elective bucket total		24	
nechani						Natu	ral Intelli	goneo Art	ificial Intelligence			
	cs Course	Course name	Catagory	Cradita	Brorog			Course		Catagory	Cradita	Prere
	Course code	Course name Biomechanics Lab	Category MEC	Credits	Prereq BM3040			Course code	Course name Reinformcement learning	Category	Credits	
	Course codeBM3001BM4040	Biomechanics Lab Mechano-biology	MEC MEC	2	BM3040 BM3040			Course code Al2010 Al4000	Reinformcement learning Robotics	NI	2	CS339
	Course code BM3001	Biomechanics Lab	MEC	2	BM3040			Course code AI2010	Reinformcement learning	NI	2	CS339 MA211
	Course code BM3001 BM4040 BM4051	Biomechanics Lab Mechano-biology Computational Biomechanics Lab	MEC MEC MEC	2 3 2	BM3040 BM3040 BM3040			Course code Al2010 Al4000 BM2033	Reinformcement learning Robotics Probability and Random Processes Natural intelligence,	NI NI NI	2 3 2	CS339 MA211 BM300 BM300
	Course code BM3001 BM4040 BM4051 BM4060 BM5141	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2	MEC MEC MEC MEC MEC	2 3 2 2 2	BM3040 BM3040 BM3040 BM3000 BM5090			Course code Al2010 Al4000 BM2033 BM4025 BM4060	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science	NI NI NI NI	2 3 2 2 2	CS339 MA211 BM300 BM300 BM406 ID <sp:< td=""></sp:<>
	Course code BM3001 BM4040 BM4051 BM4060 BM5141 BM5160 BM6070 BM6080	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics	MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 2 3 2 3 2	BM3040 BM3040 BM3040 BM3000 BM5090 BM3040 ID ;			Course code Al2010 Al4000 BM2033 BM4025 BM4060 BM4061 BM4070	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab	NI NI NI NI NI NI NI	2 3 2 2 2 2 2 2 2 2 2	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407</sp:
	Course code BM3001 BM4040 BM4051 BM4060 BM5141 BM5160 BM6070	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics	MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 2 3	BM3040 BM3040 BM3040 BM3000 BM3000 BM3040 ID ; BM3040 ID;			Course code Al2010 Al4000 BM2033 BM4025 BM4060 BM4061	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab	NI NI NI NI NI NI	2 3 2 2 2 2 2 2 2	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
	Course code BM3001 BM4040 BM4051 BM4060 BM5141 BM5160 BM6070 BM6080 ME3100	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation	MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 3 2 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040			Course code AI2010 AI4000 BM2033 BM4025 BM4060 BM4061 BM4070 BM4071 BM4081	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab	NI NI NI NI NI NI NI NI	2 3 2 2 2 2 2 2 2 2 2 2 2	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
	Course code BM3001 BM4040 BM4051 BM4060 BM5141 BM5160 BM6070 BM6080 ME3100	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials	MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040			Course code Al2010 Al4000 BM2033 BM4025 BM4060 BM4061 BM4070 BM4081 BM6140	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of	NI NI NI NI NI NI NI NI NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
	Course code BM3001 BM4040 BM4051 BM4060 BM5141 BM5160 BM6070 BM6080 ME3100	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials	MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040			Course code Al2010 Al4000 BM2033 BM4025 BM4060 BM4061 BM4070 BM4081 BM6140	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of	NI NI NI NI NI NI NI NI NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
Dther d	Course code BM3001 BM4040 BM4051 BM4060 BM5141 BM5160 BM6070 BM6080 ME3100	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total	MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040			Course code Al2010 Al4000 BM2033 BM4025 BM4060 BM4061 BM4070 BM4081 BM6140	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of	NI NI NI NI NI NI NI NI NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
Dther d	Course codeBM3001BM4040BM4051BM4050BM5141BM5160BM5160BM6070BM6070MS2050MS2050PartmentCourse	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total	MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040			Course code AI2010 AI4000 BM2033 BM4025 BM4060 BM4061 BM4071 BM4071 BM4071 BM4081 BM6140 CS3390	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of	NI NI NI NI NI NI NI NI NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
	Course codeBM3001BM4040BM4051BM4060BM5141BM5160BM6070BM6080MS2050MS2050PartmentCourse NumberBO1010	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Life Science	MEC MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040			Course code AI2010 AI4000 BM2033 BM4005 BM40060 BM4061 BM4071 BM4081 BM6140 CS3390 CS3390 LA1760	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication	NI OUID OUID Credits 2	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
BT	Course code BM3001 BM4040 BM4051 BM4050 BM4060 BM5141 BM5160 BM5100 BM6070 BM6080 MS2050 MS2050 BM5140 BM6080 BM6080 BM6080 BM6080 BM6080 MS2050 BM5100 MS2050 BM5100 BM52050 BM52050 BM5100 BM52050 BM52050	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total	MEC MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040			Course code AI2010 AI4000 BM2033 BM4005 BM40060 BM4061 BM4071 BM4071 BM4081 BM6140 CS3390 BM6140 LA1760 EM3020	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication Introduction to Entrepreneurship	NI OUID OUID	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
BT	Course codeBM3001BM4040BM4051BM4051BM4060BM5141BM5160BM6070BM6080MS2050MS2050MS2050BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BO1010BO6070ID1063ID2230	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Courses Itife Science Molecular Basis of Diseases Introduction to Programming Data structures and applications	MEC MEC MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040			Course code AI2010 AI4000 BM2033 BM4005 BM40060 BM4061 BM4061 BM4070 BM4071 BM4071 BM4071 BM4081 BM4081 BM6140 CS3390 LA1760 EM3020 MA1110 MA1220	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication Introduction to Entrepreneurship Calculus - I Calculus - II	NI OUID OUID	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
BT	Course codeBM3001BM4040BM4051BM4051BM4060BM5141BM5160BM6070BM6030MS2050MS2050MS2050BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080BM6080B01010B06070ID1063	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Life Science Molecular Basis of Diseases Introduction to Programming	MEC MEC MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040			Course code AI2010 AI4000 BM2033 BM4005 BM40060 BM4070 BM4071 BM4070 BM4070 Course BM4070 BM4070 BM4070 BM4070 BM4070 BM4071 BM4070 BM4070 BM4071 BM4071 BM4071 BM4071 BM4070 BM4071 BM4071	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication Introduction to Entrepreneurship Calculus - I Calculus - II Elementary Linear algebra Differential equations	NI 1 1 1 1 1 1 1 1 1 1 1	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
BT	Course BM3001 BM4040 BM4051 BM4050 BM4060 BM5141 BM5160 BM5160 BM6070 BM6070 BM6080 MS2050 MS2050 BM6080 BM60070 BM6080 BM60070 BM60070 BM60070 BO1010 BO6070 BO1010 BO6070 AI2010 CS3390	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Courses Itife Science Molecular Basis of Diseases Introduction to Programming Data structures and applications Reinformcement learning Machine learning, Foundations of	MEC MEC MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040			Course code Al2010 Al4000 BM2033 BM4005 BM4001 BM4060 BM4061 BM4071 BM4071 BM4031 CS3390 BM6140 CS3390 LA1760 EM3020 MA1110 MA1140	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication Introduction to Entrepreneurship Calculus - I Calculus - II Elementary Linear algebra	NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
BT CS CY	Course BM3001 BM4040 BM4051 BM4050 BM4050 BM4060 BM5141 BM5160 BM5160 BM5100 BM6070 BM6080 ME3100 MS2050 BM6080 BM6080	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Courses Introduction to Programming Data structures and applications Reinformcement learning Machine learning, Foundations of Environmental Chemistry	MEC MEC MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040			Course code AI2010 AI4000 BM2033 BM4005 BM4025 BM4060 BM4061 BM4061 BM4070 BM4071 BM4070 Course MA6140 CS3390 LA1760 EM3020 MA1110 MA1140 MA1150 MA2140	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication Introduction to Entrepreneurship Calculus - I Calculus - II Elementary Linear algebra Differential equations Introduction to Statistics	NI 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
BT CS CY	Course BM3001 BM4040 BM4051 BM4050 BM4060 BM5141 BM5160 BM5160 BM6070 BM6070 BM6080 MS2050 MS2050 BM6080 BM60070 BM6080 BM60070 BM60070 BM60070 BO1010 BO6070 BO1010 BO6070 AI2010 CS3390	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Courses Itife Science Molecular Basis of Diseases Introduction to Programming Data structures and applications Reinformcement learning Machine learning, Foundations of	MEC MEC MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040		MA	Course code Al2010 Al4000 BM2033 BM4005 BM4001 BM4060 BM4061 BM4070 BM4071 BM4031 BM4081 CS3390 LA1760 EM3020 MA1110 MA1140 MA1150 MA2110	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication Introduction to Entrepreneurship Calculus - I Calculus - II Elementary Linear algebra Differential equations Introduction to Probability	NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp3 BM300 BM407 BM614</sp3
BT CS CY	Course BM3001 BM4040 BM4051 BM4050 BM4060 BM5141 BM5160 BM5160 BM5160 BM6070 BM6080 M53100 M52050 M52050 BM6080 M52050 BM6080 M52050 BM6080 M52050 BM60070 BM60070 M52050 BM60070 M52050 ID10003 BO1010 BO6070 ID1063 ID2230 AI2010 CS3390 CY1018 EE1102	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Courses Introduction to Programming Data structures and applications Reinformcement learning Machine learning, Foundations of Environmental Chemistry Linear Systems and Signal	MEC MEC MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040		MA	Course code AI2010 AI4000 BM2033 BM4005 BM4025 BM4060 BM4061 BM4061 BM4070 BM4071 BM4070 BM4070 BM4070 BM4081 BM41100 MA1150<	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication Introduction to Entrepreneurship Calculus - I Calculus - II Elementary Linear algebra Differential equations Introduction to Statistics Englineering Mechanics	NI I	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp3 BM300 BM407 BM614</sp3
BT CS CY	Course BM3001 BM4040 BM4051 BM4050 BM4060 BM5141 BM5160 BM5160 BM5160 BM6070 BM6080 M53100 M52050 M52050 BM6080 M52050 BM6080 M52050 BM6080 M52050 BM60070 BM60070 M52050 BM60070 M52050 ID10003 BO1010 BO6070 ID1063 ID2230 AI2010 CS3390 CY1018 EE1102	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Courses Introduction to Programming Data structures and applications Reinformcement learning Machine learning, Foundations of Environmental Chemistry Linear Systems and Signal	MEC MEC MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040		MA	Course code AI2010 BM2033 BM4000 BM4025 BM4071 BM4060 BM4071 BM4071 BM4071 BM4071 BM4071 BM4071 BM4071 BM4071 BM4071 BM4071 BM407 BM407 BM407 BM407 BM400 MA1140 MA1140 MA1140	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication Introduction to Entrepreneurship Calculus - I Calculus - I Elementary Linear algebra Differential equations Introduction to Statistics Introduction to Statistics Introduction to Statistics Digital fabrication Robotics	NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp3 BM300 BM407 BM614</sp3
BT CS CY EE	Course BM3001 BM4040 BM4051 BM4050 BM5141 BM5160 BM5160 BM5160 BM6070 BM6080 M53100 M53001 BM6080 M53000 M53000 BM6080 M53000 M50070 B01010 B06070 B01010 B06070 ID1063 ID2230 A12010 CS3390 ID ID <	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Courses Introduction to Programming Data structures and applications Reinformcement learning Machine learning, Foundations of Environmental Chemistry Linear Systems and Signal	MEC MEC MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040		MA	Course codeAI2010AI4000BM2033BM4025BM4001BM4060BM4071BM4071BM4071BM4071BM4071Course MA1140LA1760EM3020MA1110MA1110MA1150MA1150MA2140ID1054AI4000ME1020P1108	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Secourse Name English Communication Introduction to Entrepreneurship Calculus - I Calculus - I Elementary Linear algebra Differential equations Introduction to Probability Introduction to Statistics Digital fabrication Robotics Modelling and simulation Modelling and simulation	NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp3 BM300 BM407 BM614</sp3
BT CS CY EE	Course BM3001 BM4040 BM4051 BM4050 BM4060 BM5141 BM5160 BM5160 BM6070 BM6080 M53100 M52050 M52050 BM6080 M52050 BM6080 M52050 BM6080 M52050 BM6080 M52050 BM6080 M52050 M52050	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Courses Courses Courses Introduction to Programming Data structures and applications Reinformcement learning Machine learning, Foundations of Environmental Chemistry Basic Electrical Engineering Linear Systems and Signal Processing	MEC MEC MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040		MA	Course codeAI2010AI4000BM2033BM4025BM4001BM4060BM4071BM4071BM4071BM4071BM4071Course MA1140LA1760EM3020MA1110MA1110MA1150MA1150MA2140ID1054AI4000ME1020P1108	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication Introduction to Entrepreneurship Calculus - I Calculus - I Elementary Linear algebra Differential equations Introduction to Statistics Digital fabrication Robotics Modelling and simulation	NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
BT CS CY EE	Course BM3001 BM4040 BM4051 BM4050 BM5141 BM5160 BM5160 BM5160 BM6070 BM6080 M53100 M53001 BM6080 M53000 M53000 BM6080 M53000 M50070 B01010 B06070 B01010 B06070 ID1063 ID2230 A12010 CS3390 ID ID <	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Introduction to Programming Data structures and applications Reinformcement learning Machine learning, Foundations of Environmental Chemistry Basic Electrical Engineering Linear Systems and Signal Processing Mechanical behavior of materials Soft Materials Proc, Struct, Char &	MEC MEC MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040		MA	Course codeAI2010AI4000BM2033BM4025BM4001BM4060BM4071BM4071BM4071BM4071BM4071Course MA1140LA1760EM3020MA1110MA1110MA1150MA1150MA2140ID1054AI4000ME1020P1108	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Secourse Name English Communication Introduction to Entrepreneurship Calculus - I Calculus - I Elementary Linear algebra Differential equations Introduction to Probability Introduction to Statistics Digital fabrication Robotics Modelling and simulation Modelling and simulation	NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
BT CS CY EE	Course BM3001 BM4040 BM4051 BM4050 BM5141 BM5160 BM5160 BM5160 BM6070 BM6080 M53100 M53001 BM6080 M53000 M53000 BM6080 M53000 M50070 B01010 B06070 B01010 B06070 ID1063 ID2230 A12010 CS3390 ID ID <	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Introduction to Programming Data structures and applications Reinformcement learning Machine learning, Foundations of Environmental Chemistry Basic Electrical Engineering Linear Systems and Signal Processing Mechanical behavior of materials Soft Materials Proc, Struct, Char &	MEC MEC MEC MEC MEC MEC MEC MEC MEC MEC	2 3 2 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040		MA	Course codeAI2010AI4000BM2033BM4005BM40060BM4061BM4071BM4071BM4071BM4071Course MA1140LA1760EM3020MA1110MA1110MA11400MA11400MA1150MA11400MA11400EP1108EP1208AIA00MA100	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication Introduction to Entrepreneurship Calculus - I Calculus - II Elementary Linear algebra Differential equations Introduction to Statistics Introduction to Probability Introduction to Statistics Digital fabrication Robotics Modern Physics Electricity & magnetism Introduction Physics	NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
BT CS CY EE	Course BM3001 BM4040 BM4051 BM4050 BM5141 BM5160 BM5160 BM5160 BM6070 BM6080 M53100 M53001 BM6080 M53000 M53000 BM6080 M53000 M50070 B01010 B06070 B01010 B06070 ID1063 ID2230 A12010 CS3390 ID ID <	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Introduction to Programming Data structures and applications Reinformcement learning Machine learning, Foundations of Environmental Chemistry Basic Electrical Engineering Linear Systems and Signal Processing Mechanical behavior of materials Soft Materials Proc, Struct, Char &	MEC M	2 3 2 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040		MA ME ME PH	Course codeAI2010AI4000BM2033BM4025BM4001BM4061BM4071BM4071BM4071BM4071CS3390LA1760LA1760EM3020MA1110MA1150MA1140ID1054AI4000ME3100MA1150PercentaPercentage	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication Introduction to Entrepreneurship Calculus - 1 Calculus - 11 Elementary Linear algebra Differential equations Introduction to Statistics Digital fabrication Robotics Modern Physics Electricity & magnetism Introduction Probability	NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
BT CS CY EE	Course BM3001 BM4040 BM4051 BM4050 BM5141 BM5160 BM5160 BM5160 BM6070 BM6080 M53100 M53001 BM6080 M53000 M53000 BM6080 M53000 M50070 B01010 B06070 B01010 B06070 ID1063 ID2230 A12010 CS3390 ID ID <	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Courses Course Name Life Science Molecular Basis of Diseases Introduction to Programming Data structures and applications Reinformcement learning Machine learning, Foundations of Data structures and applications Reinformcement learning Machine learning, Foundations of Environmental Chemistry Basic Electrical Engineering Linear Systems and Signal Processing Course type Core credits BE credits	MEC M	2 3 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040		MA ME ME PH Course	Course codeAI2010AI4000BM2033BM4025BM4071BM4061BM4071BM4071BM4071BM4071Course MA100LA1760EM3020MA1110MA1110MA11400MA11400MA11400MA1150ID1054AI4000ME1020Percenta geS7.03%14.06%	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication Introduction to Entrepreneurship Calculus - 1 Calculus - 1 Calculus - 1 Elementary Linear algebra Differential equations Introduction to Statistics Digital fabrication Robotics Modern Physics Electricity & magnetism Introduction to Statistics Modern Physics Electricity & magnetism Introduction to Statistics	NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp: BM300 BM407 BM614</sp:
BT CS CY EE	Course BM3001 BM4040 BM4051 BM4050 BM5141 BM5160 BM5160 BM5160 BM6070 BM6080 M53100 M53001 BM6080 M53000 M53000 BM6080 M53000 M50070 B01010 B06070 B01010 B06070 ID1063 ID2230 A12010 CS3390 ID ID <	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Courses Courses Course Name Life Science Molecular Basis of Diseases Introduction to Programming Data structures and applications Reinformcement learning Machine learning, Foundations of Environmental Chemistry Basic Electrical Engineering Linear Systems and Signal Processing Course type Core credits BE c	MEC M	2 3 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040		MA ME ME PH Course Course Course Course Course	Course codeAI2010AI4000BM2033BM4005BM4060BM4061BM4061BM4071BM4031BM4031CS3390CS3390LA1760EM3020MA1110MA1140MA1120MA1140MA1140MA1140MA1140MA1140MA1140Percentage57.03%14.06%S7.03%13.28%2.34%	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Course Name English Communication Introduction to Entrepreneurship Zalculus - 1 Calculus - 1 Modern Physics Introduction to Statistics Modern Physics Electricity & magnetism Modern Physics Electricity & magnetism Modern Physics Staference percentage Stafey	NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp3 BM300 BM407 BM614</sp3
CY EE CY 6 CY 6 6 6 7 7 7 7 7 7 7 7 7 7 7 7 7	Course BM3001 BM4040 BM4051 BM4050 BM5141 BM5160 BM5160 BM5160 BM6070 BM6080 M53100 M53001 BM6080 M53000 M53000 BM6080 M53000 M50070 B01010 B06070 B01010 B06070 ID1063 ID2230 A12010 CS3390 ID ID <	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Elective bucket total Courses Courses Courses Courses Course Name Life Science Molecular Basis of Diseases Course name Life Science Molecular Basis of Diseases Course name Electrical Engineering Data structures and applications Reinformcement learning Machine learning, Foundations of Environmental Chemistry Basic Electrical Engineering Linear Systems and Signal Processing Course type Core credits BS credits	MEC M	2 3 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040		MA ME ME PH PH Course Course Course Course Course Course Course	Course codeAI2010AI4000BM2033BM4025BM4060BM4061BM4061BM4071BM4031BM4071BM4071BM4081BM6140CS3390CS3390LA1760EM3020MA1110MA1140MA1140MA1140MA1140MA1140MA1140MA1140Percentage57.03%14.06%7.03%	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Seconse Name English Communication Introduction to Entrepreneurship Calculus - 1 Calculus - 1 Calculus - 11 Elementary Linear algebra Differential equations Introduction to Statistics Digital fabrication Robotics Modelling and simulation Modelling and simulation Modern Physics Electricity & magnetism Int-12% 4% 7-8%	NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	BM2033 CS339 MA211 BM300 BM300 BM406 ID <sp3 BM300 BM407 BM614 BM300</sp3
BT CS CY EE	Course BM3001 BM4040 BM4051 BM4050 BM5141 BM5160 BM5160 BM5160 BM6070 BM6080 M53100 M53001 BM6080 M53000 M53000 BM6080 M53000 M50070 B01010 B06070 B01010 B06070 ID1063 ID2230 A12010 CS3390 ID ID <	Biomechanics Lab Mechano-biology Computational Biomechanics Lab Movement science Biomaterials-2 Mechanics of bio-fluids Biomicrofluidics Advanced Biomechanics Modelling and simulation Mechanical behavior of materials Elective bucket total Courses Courses Courses Courses Course Name Life Science Molecular Basis of Diseases Course name Life Science Molecular Basis of Diseases Course Name Life Science Molecular Basis of Diseases Courses Course Name Course Name Course S Course Name Course S Course Name Courses Course Name Course Na	MEC M	2 3 2 2 2 2 3 3 2 3 3 3	BM3040 BM3040 BM3040 BM3000 BM3040 ID ; BM3040 ID; BM3040		MA ME ME PH PH Course Dept. Bas Engg Bas Sci Bas Sci Bas Sci	Course codeAI2010AI4000BM2033BM4025BM4060BM4061BM4071BM4071BM4031BM4071Course MA1140CalanaBM4071BM4031BM4071BM4000MA11100MA11100MA21400MA21400BM40100MA21400PercentaBS7.03%14.06%13.28%2.34%	Reinformcement learning Robotics Probability and Random Processes Natural intelligence, Implementations of Movement science Movement sciences lab Neurotechnology & BCI theory Neurotechnology & BCI lab Computational neuroscience lab Theoretical & computational neuroscience Machine learning, Foundations of Elective bucket total Seconse Name English Communication Introduction to Entrepreneurship Calculus - 1 Calculus - 1 Calculus - 11 Elementary Linear algebra Differential equations Introduction to Statistics Digital fabrication Robotics Modelling and simulation Modelling and simulation Modern Physics Electricity & magnetism Int-12% 4% 7-8%	NI	2 3 2 2 2 2 2 2 2 2 2 2 2 2 2 2 3	CS339 MA211 BM300 BM300 BM406 ID <sp> BM300 BM407 BM614</sp>