

Year	SGGSIE&T course	Course Code	NPTEL Course	Course Co-ordinator	NPTEL Course URL	Swayam Course	Course Co-ordinator	Swayam Course URL
<b>Second Year</b>								
2	Mathematics-III: Applied Linear Algebra	BSC273				Matrix Analysis with applications	Prof. S K Gupta, Prof. Sanjeev Kumar	<a href="https://swayam.gov.in/nd1_noc20_ma34/preview">https://swayam.gov.in/nd1_noc20_ma34/preview</a>
2	Digital Electronics	ESC282				Switching Circuits and Logic Design	Prof. Indranil Sengupta	<a href="https://swayam.gov.in/nd1_noc20_cs67/preview">https://swayam.gov.in/nd1_noc20_cs67/preview</a>
2	Discrete Mathematics	PCC-CS201				Discrete Mathematics	Prof. Sudarshan Iyengar, Prof. Neeldhara	<a href="https://swayam.gov.in/nd1_noc20_cs82/preview">https://swayam.gov.in/nd1_noc20_cs82/preview</a>
2	Data Structures	PCC-CS202				Data Structure and algorithms using Java	Prof. Debasis Samanta	<a href="https://swayam.gov.in/nd1_noc20_cs85/preview">https://swayam.gov.in/nd1_noc20_cs85/preview</a>
2	Object Oriented Programming with Java	PCC-CS203	Programming in Java	Prof. Debasis Samanta	<a href="https://nptel.ac.in/courses/106/105/106105191/">https://nptel.ac.in/courses/106/105/106105191/</a>	Programming in Java	Prof. Debasis Samanta	<a href="https://swayam.gov.in/nd1_noc20_cs08/preview">https://swayam.gov.in/nd1_noc20_cs08/preview</a>
2	Numerical and Scientific Computing	PCC-CS204				Scientific Computing using Matlab	Prof. Mani Mehra, Prof. Vivek K. Aggarwal	<a href="https://swayam.gov.in/nd1_noc20_ma40/preview">https://swayam.gov.in/nd1_noc20_ma40/preview</a>
<b>Third Year</b>								
3	Software Engineering	PCC-CS301				Software Engineering	Prof. Rajib Mall	<a href="https://swayam.gov.in/nd1_noc20_cs68/preview">https://swayam.gov.in/nd1_noc20_cs68/preview</a>
3	Database Management Systems	PCC-CS302				Data Base Management System	Prof. Partha Pratim Das, Prof. Samiran Chattopadhyay	<a href="https://swayam.gov.in/nd1_noc20_cs46/preview">https://swayam.gov.in/nd1_noc20_cs46/preview</a>
3	Formal Language & Automata Theory	PCC-CS303				Theory of Computation	Prof. Raghunath Tewari	<a href="https://swayam.gov.in/nd1_noc19_cs79/preview">https://swayam.gov.in/nd1_noc19_cs79/preview</a>
3	Operating Systems	PCC-CS304				Introduction to Operating Systems	Prof. Chester Rebeiro	<a href="https://swayam.gov.in/nd1_noc20_cs75/preview">https://swayam.gov.in/nd1_noc20_cs75/preview</a>
3	Advanced Java Programming	PEC-CS305	Programming in Java	Prof. Debasis Samanta	<a href="https://nptel.ac.in/courses/106/105/106105191/">https://nptel.ac.in/courses/106/105/106105191/</a>	Programming in Java	Prof. Debasis Samanta	<a href="https://swayam.gov.in/nd1_noc20_cs08/preview">https://swayam.gov.in/nd1_noc20_cs08/preview</a>

3	Digital Signal Processing	PEC-CS306	Digital Signal Processing	Prof. S.C. Dutta Roy	<a href="https://nptel.ac.in/courses/117/102/117102060/">https://nptel.ac.in/courses/117/102/117102060/</a>	Digital Signal Processing	Prof.C.S. Ramalingam	<a href="https://swayam.gov.in/nd1_noc19_ee50/preview">https://swayam.gov.in/nd1_noc19_ee50/preview</a>
3	Introduction to Machine Learning	PEC-CS307	Introduction to Machine Learning	Balaraman Ravindran	<a href="https://nptel.ac.in/noc/courses/noc16/SEM1/noc16-cs03/">https://nptel.ac.in/noc/courses/noc16/SEM1/noc16-cs03/</a>	Introduction to Machine Learning	Balaraman Ravindran	<a href="https://swayam.gov.in/nd1_noc20_cs73/preview">https://swayam.gov.in/nd1_noc20_cs73/preview</a>
			Introduction to Machine Learning	Sudeshna Sarkar	<a href="https://nptel.ac.in/noc/courses/noc16/SEM2/noc16-cs18/">https://nptel.ac.in/noc/courses/noc16/SEM2/noc16-cs18/</a>			
			Machine Learning for Engineering and Science Applications	Ganapathy Krishnamurthi, Balaji Srinivasan	<a href="https://nptel.ac.in/noc/courses/noc19/SEM1/noc19-cs14/">https://nptel.ac.in/noc/courses/noc19/SEM1/noc19-cs14/</a>			
<b>Final Year</b>								
4	TCP/IP Networking	CS423	Computer Networks and Internet Protocol	SOUMYA K GHOSH, SANDIP CHAKRABORTY	<a href="https://nptel.ac.in/noc/courses/noc20/SEM1/noc20-cs23/">https://nptel.ac.in/noc/courses/noc20/SEM1/noc20-cs23/</a>	Computer Networks and Internet Protocol	SOUMYA K GHOSH, SANDIP CHAKRABORTY	<a href="https://swayam.gov.in/nd1_noc20_cs23/preview">https://swayam.gov.in/nd1_noc20_cs23/preview</a>
4	Cryptography and Network Security	CS424	Cryptography and Network Security	Sourav Mukhopadhyay	<a href="https://nptel.ac.in/noc/courses/noc19/SEM1/noc19-cs28/">https://nptel.ac.in/noc/courses/noc19/SEM1/noc19-cs28/</a>	Cryptography and Network Security	Sourav Mukhopadhyay	<a href="https://swayam.gov.in/nd1_noc20_cs21/preview">https://swayam.gov.in/nd1_noc20_cs21/preview</a>
			Internetwork Security	Sourav Mukhopadhyay	<a href="https://nptel.ac.in/noc/courses/noc17/SEM1/noc17-cs02/">https://nptel.ac.in/noc/courses/noc17/SEM1/noc17-cs02/</a>			
4	Data Mining	CS440E	Data Mining	Prof. Pabitra Mitra	<a href="https://nptel.ac.in/noc/courses/noc18/SEM1/noc18-cs14/">https://nptel.ac.in/noc/courses/noc18/SEM1/noc18-cs14/</a>	Data Mining	Mr. L. Abraham David	<a href="https://swayam.gov.in/nd2_cec19_cs01/preview">https://swayam.gov.in/nd2_cec19_cs01/preview</a>
4	Cloud Computing	CS440F	Cloud computing	Prof. Soumya Kanti Ghosh	<a href="https://nptel.ac.in/noc/courses/noc17/SEM2/noc17-cs23/">https://nptel.ac.in/noc/courses/noc17/SEM2/noc17-cs23/</a>	Cloud computing	Prof. Soumya Kanti Ghosh	<a href="https://swayam.gov.in/nd1_noc20_cs20/preview">https://swayam.gov.in/nd1_noc20_cs20/preview</a>
4	Information Security	CS440G	Introduction to Information Security - I	Dilip H Ayyar	<a href="https://nptel.ac.in/noc/courses/noc15/SEM1/noc15-cs03/">https://nptel.ac.in/noc/courses/noc15/SEM1/noc15-cs03/</a>			

4	Digital Image Processing	CS440H				Digital Image Processing	Prof. Prabir Kumar Biswas	<a href="https://swayam.gov.in/noc19_cs54/preview">https://swayam.gov.in/noc19_cs54/preview</a>
4	Deep Learning	CS440I				Deep Learning IITKGP	Prof. Prabir Kumar Biswas	<a href="https://swayam.gov.in/noc19_cs85/preview">https://swayam.gov.in/noc19_cs85/preview</a>
						Deep Learning Part 1 (IITM)	Prof. Sudarshan Iyengar & Prof.Mitesh M. Khapra	<a href="https://swayam.gov.in/noc20_ee75/preview">https://swayam.gov.in/noc20_ee75/preview</a>
4	Big Data Analytics	CS441D	BIG DATA COMPUTING	PROF. RAJIV MISRA	<a href="https://nptel.ac.in/noc/courses/noc19/SEM1/noc19-cs33/">https://nptel.ac.in/noc/courses/noc19/SEM1/noc19-cs33/</a>	BIG DATA COMPUTING	PROF. RAJIV MISRA	<a href="https://swayam.gov.in/noc19_cs58/preview">https://swayam.gov.in/noc19_cs58/preview</a>
4	Computer Vision	CS441E	Computer Vision	PROF.JAYANTA MUKHOPADHYAY	<a href="https://nptel.ac.in/noc/courses/noc18/SEM1/noc18-cs12/">https://nptel.ac.in/noc/courses/noc18/SEM1/noc18-cs12/</a>	Computer Vision	PROF.JAYANTA MUKHOPADHYAY	<a href="https://swayam.gov.in/noc20_cs92/preview">https://swayam.gov.in/noc20_cs92/preview</a>
4	Real Time Systems	CS441F	Real-Time Operating Systems	Prof.RAJIB MALL	<a href="https://swayam.gov.in/noc20_cs16/preview">https://swayam.gov.in/noc20_cs16/preview</a>	Real-Time Operating Systems	Prof.RAJIB MALL	<a href="https://swayam.gov.in/noc20_cg37/preview">https://swayam.gov.in/noc20_cg37/preview</a>
4	Bandit Algorithm (Online Machine Learning)	CS441I				Bandit Algorithm (Online Machine Learning)	Prof. Manjesh hanawal	<a href="https://swayam.gov.in/noc20_mg37/preview">https://swayam.gov.in/noc20_mg37/preview</a>