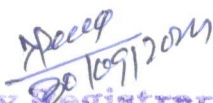


NAAC-1.2.2 : List of New Courses B.Tech

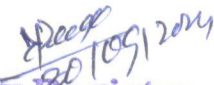
Sl.No.	Course Title	Course Code	Year/Branch
1	Mathematics- I	BSMA1101	First Year Subject
2	Physics	BSPY1102	First Year Subject
3	Chemistry	BSCY1103	First Year Subject
4	Basic Electrical Engineering	ESEE2101	First Year Subject
5	Basic Electronics Engineering	ESEC2102	First Year Subject
6	Basic Civil Engineering	ESCE2103	First Year Subject
7	Basic Mechanical Engineering	ESME2104	First Year Subject
8	Communicative English	HSHM3101	First Year Subject
9	Programming Language using C	ESCS2105	First Year Subject
10	Communicative English Lab	HSHM7102	First Year Subject
11	Programming Language using C Lab	ESCS7110	First Year Subject
12	Engineering Graphics & Design Lab	ESCE7111	First Year Subject
13	Workshop Practice	ESME7112	First Year Subject
14	Induction Programme (21 Days)	MCGN9101	First Year Subject
15	Mathematics- II	BSMA1106	First Year Subject
16	Engineering Mechanics	ESME2113	First Year Subject
17	Physics Lab	BSPY7104	First Year Subject
18	Chemistry Lab	BSCY7105	First Year Subject
19	Basic Electrical Engineering Lab	ESEE7106	First Year Subject
20	Basic Electronics Engineering Lab	ESEC7107	First Year Subject
21	Basic Civil Engineering Lab	ESCE7108	First Year Subject
22	Basic Mechanical Engineering Lab	ESME7109	First Year Subject
23	(A)NCC/(B)NSS/(C)Yoga/(D)Professional	MCGN9102	First Year Subject
24	Engineering Economics	HSHM3203	Second Year/Civil
25	Organizational Behaviour	HSHM3204	Second Year/Civil
26	Mathematics-III	BSMA1207	Second Year/Civil
27	Highway and Traffic Engineering	ESCE2212	Second Year/Civil
28	Civil Engineering Materials and Construction I	PCCE4201	Second Year/Civil
29	Structural Analysis-I	PCCE4202	Second Year/Civil
30	Concrete Technology	HNCE201	Second Year/Civil
31	Materials Testing Laboratory	PCCE7201	Second Year/Civil
32	Building Drawing (Computer Based)	PCCE7202	Second Year/Civil
33	Design of Concrete Structures-I	PCCE4203	Second Year/Civil
34	Surveying	PCCE4204	Second Year/Civil
35	Fluid Mechanics and Hydraulic Machines	PCCE4205	Second Year/Civil
36	Masonry Structures	HNCE0202	Second Year/Civil
37	Detailing of Concrete Structures	PCCE7203	Second Year/Civil
38	Surveying Practice	PCCE7204	Second Year/Civil
39	Fluid Mechanics Laboratory	PCCE7205	Second Year/Civil
40	Polymer Technology	OECH6201	Open Elective
41	Basics of Autocad - Chemcad - Aspen Plus	OECH6210	Open Elective
42	Sustainable Construction Method	OECE6202	Open Elective
43	Signals and Systems	OEEE6204	Open Elective
44	Python for Engineers	OEEC6205	Open Elective
45	Safety Engineering	OEME6206	Open Elective
46	Discrete Mathematics	OEMA6208	Open Elective
47	Composite Materials	OEMT6209	Open Elective
48	Design of Steel Structures	PCCE4306	Third Year/Civil
49	Environmental Engineering	PCCE4307	Third Year/Civil
50	Geo Technical Engineering	PCCE4308	Third Year/Civil
51	Open Channel Flow	PECE5301	Third Year/Civil
52	Water Resources Engineering	PECE5302	Third Year/Civil
53	Design of Structural Systems	HNCE0303	Third Year/Civil
54	Detailing of Steel Structures	PCCE7306	Third Year/Civil
55	Environmental Engineering Laboratory	PCCE7307	Third Year/Civil


Deputy Registrar
 Indira Gandhi Institute of Technology
 Sarang, Dhenkanal-759146

56	Geo Technical Engineering Laboratory	PCCE7308	Third Year/Civil
57	Petroleum Refinery Engineering	OECH6311	Third Year/Civil
58	Green Technology	OECH6330	Third Year/Civil
59	Mechanics of Solids	OECE6312	Third Year/Civil
60	OOPs Using C++	OECS6203	Third Year/Civil
61	Cloud Computing	OECS6331	Third Year/Civil
62	Digital Signal Processing	OEEE6313	Third Year/Civil
63	Industrial Automation with PLC and SCADA	OEEC6314	Third Year/Civil
64	Introduction to Composite Materials	OEME6316	Third Year/Civil
65	Nanomaterials	OEMT6315	Third Year/Civil
66	Powder Metallurgy	OEPD6317	Third Year/Civil
67	Numerical Methods	OEMA6207	Third Year/Civil
68	Enhancing Soft Skills and Personality	HSHM3306	Third Year/Civil
69	Design of Concrete Structures-II	PCCE4309	Third Year/Civil
70	Structural Analysis -II	PCCE4310	Third Year/Civil
71	Irrigation Engineering	PECE5303	Third Year/Civil
72	Environmental Science	MCGN9305	Third Year/Civil
73	Universal Human Values	MCHM9306	Third Year/Civil
74	Ground Improvement Engineering	HNCE0304	Third Year/Civil
75	Detailing of Advanced Concrete Structures	PCCE7309	Third Year/Civil
76	Transportation Engineering Laboratory	PCCE7310	Third Year/Civil
77	Skill Project	PJCE8301	Third Year/Civil
78	Food Biotechnology	OECH6318	Third Year/Civil
79	Fluidization Engineering	OECH6319	Third Year/Civil
80	Structural Dynamics and Earthquake Engineering	OECE6320	Third Year/Civil
81	Data Science	OECS6321	Third Year/Civil
82	Sensors and Transducers	OEEE6322	Third Year/Civil
83	Mechatronics	OEEC6324	Third Year/Civil
84	Marketing Management	OEHM6325	Third Year/Civil
85	Optimization in Engineering	OEMA6326	Third Year/Civil
86	Industrial Engineering and Operation Research	OEME6327	Third Year/Civil
87	Biomaterials	OEMT6328	Third Year/Civil
88	Operation Research	OEPD6329	Third Year/Civil
89	Quantity Survey and Estimation	PCCE4411	Fourth Year/Civil
90	Advanced Surveying	PCCE4412	Fourth Year/Civil
91	Advanced Geo Technical Engineering	PECE5404	Fourth Year/Civil
92	Advanced Transportation Engineering	PECE5405	Fourth Year/Civil
93	Environmental Impact Assessment	HNCE0405	Fourth Year/Civil
95	Mineral Processing	OECH6432	Open Elective
96	Colloid and Interfacial Engineering	OECH6433	Open Elective
97	Finite Element Analysis	OECE6434	Open Elective
98	Research Methods in Computer Science	OECS6435	Open Elective
99	Analog & Digital Communication Systems	OEEE6323	Open Elective
100	Internet of Things	OEEE6436	Open Elective
101	Soft Computing	OEEC6437	Open Elective
102	Reliability Engineering	OEME6438	Open Elective
103	Robotics	OEME6439	Open Elective
104	Nanocomposites	OEMT6440	Open Elective
105	Industrial Management	OEPD6441	Open Elective
106	Advanced Environmental Engineering	PECE5406	Fourth Year/Civil
107	Traffic Planning and Transportation Planning	PECE5407	Fourth Year/Civil
108	Comprehensive Viva Voce	PJCE8406	Fourth Year/Civil
109	Electrical Circuit Analysis and Synthesis	PCEE4201	Second Year/Electrical
110	Electrical Machines-I	PCEE4202	Second Year/Electrical
111	Constitution of India	MCHM9203	Second Year/Electrical
112	Electrical and Electronics Measurement	HNEE0201	Second Year/Electrical
113	Electrical Machines-I	MNEE0201	Second Year/Electrical
114	Analog Electronic Circuits Laboratory	PCEE7201	Second Year/Electrical
115	Electrical Machines Laboratory -I	PCEE7202	Second Year/Electrical
116	Electrical Machines-II	PCEE4203	Second Year/Electrical


Deputy Registrar
 Indira Gandhi Institute of Technology
 Sarang, Dhenkanal-759146

117	Control System EngineeringI	PCEE4204	Second Year/Electrical
118	Digital Electronic Circuits	PCEE4205	Second Year/Electrical
119	Electrical Engineering Materials	HNEE0202	Second Year/Electrical
120	Control System Engineering-I	MNEE0202	Second Year/Electrical
121	Electrical Machines Laboratory -II	PCEE7203	Second Year/Electrical
122	Control System EngineeringLaboratory	PCEE7204	Second Year/Electrical
123	Digital Electronic Circuits Laboratory	PCEE7205	Second Year/Electrical
124	Power Electronics	PCEE4306	Third Year/Electrical
125	Microprocessor & Microcontroller	PCEE4307	Third Year/Electrical
126	Electrical Power Transmission and Distribution	PCEE4308	Third Year/Electrical
127	Electromagnetic Field Theory	PEEE5301	Third Year/Electrical
128	Special Electrical Machines	PEEE5302	Third Year/Electrical
129	Digital Signal Processing	PEEE5303	Third Year/Electrical
130	Electrical Machine Design	HNEE0303	Third Year/Electrical
131	Electrical Power Transmission and Distribution	MNEE0303	Third Year/Electrical
132	Power Electronics Laboratory	PCEE7306	Third Year/Electrical
133	Microprocessor & Microcontroller Laboratory	PCEE7307	Third Year/Electrical
134	Power System Laboratory-I	PCEE7308	Third Year/Electrical
135	Electrical Drives	PCEE4309	Third Year/Electrical
136	Power System Operation & Control	PCEE4310	Third Year/Electrical
137	Power Quality	PEEE5304	Third Year/Electrical
138	FACTS	PEEE5305	Third Year/Electrical
139	Control System Engineering-II	HNEE0304	Third Year/Electrical
140	Sensors and Transducers	MNEE0304	Third Year/Electrical
141	Electrical Drives Laboratory	PCEE7309	Third Year/Electrical
142	Power System LaboratoryII	PCEE7310	Third Year/Electrical
144	Utilization of Electrical Energy	PCEE4411	Fourth Year/Electrical
145	High Voltage Engineering	PCEE4412	Fourth Year/Electrical
146	HVDC TransmissionSystems	PEEE5406	Fourth Year/Electrical
147	Restructured Power Systems	PEEE5407	Fourth Year/Electrical
148	Switch Gear & Protective Devices	PEEE5408	Fourth Year/Electrical
149	Advanced Control System	PEEE5409	Fourth Year/Electrical
150	Renewable Energy Systems	PEEE5415	Fourth Year/Electrical
151	Power Plant Engineering	HNEE0405	Fourth Year/Electrical
152	Switch Gear & Protective Devices	MNEE0405	Fourth Year/Electrical
154	Energy Audit and Management	PEEE5410	Fourth Year/Electrical
155	Smart Grid	PEEE5411	Fourth Year/Electrical
156	Electrical and Hybrid Vehicles	PEEE5412	Fourth Year/Electrical
157	Advanced Electric Drives	PEEE5413	Fourth Year/Electrical
158	Artificial Intelligence & Machine Learning	PEEE5414	Fourth Year/Electrical
160	Material Science and Engineering	ESMT2214	Second Year/Mechanical
161	Engineering Thermodynamics	PCME4201	Second Year/Mechanical
162	Mechanics of Solid	PCME4202	Second Year/Mechanical
163	Constitution of India	MCHM9203	Second Year/Mechanical
164	Essence of Indian Traditional Knowledge	MCHM9204	Second Year/Mechanical
165	Applied Mathematics Honours	HNMA0201	Second Year/Mechanical
166	Applied Thermal Engineering	MNME0201	Second Year/Mechanical
167	Mechanical Engineering Lab - I	PCME7201	Second Year/Mechanical
168	Mechanical Engineering Lab - II	PCME7202	Second Year/Mechanical
169	Fluid Mechanics & Hydraulic Machine	PCME4203	Second Year/Mechanical
170	Manufacturing Technology-I	PCME4204	Second Year/Mechanical
171	Theory of Machine-I	PCME4205	Second Year/Mechanical
172	Surface Engineering	HNME0202	Second Year/Mechanical
173	Rapid Manufacturing Processes	HNME0203	Second Year/Mechanical
174	Fluid Mechanics and Hydraulic Machine	MNME0202	Second Year/Mechanical
175	Fluid Mechanics and Hydraulic Machine Lab	PCME7203	Second Year/Mechanical
176	Manufacturing Technology Lab	PCME7204	Second Year/Mechanical
177	Theory of Machine Lab	PCME7205	Second Year/Mechanical
178	Theory of Machine-II	PCME4306	Third Year/Mechanical
179	Power Engineering	PCME4307	Third Year/Mechanical
180	Manufacturing TechnologyII	PCME4308	Third Year/Mechanical
181	Micro-Electro Mechanical system	PEME5301	Third Year/Mechanical


Deputy Registrar
 Indira Gandhi Institute of Technology
 Sarang, Dhenkanal-759146

182	Simulation, Modelling and Control	PEME5302	Third Year/Mechanical
183	Non- Conventional Energy Sources	PEME5303	Third Year/Mechanical
184	Advanced Mechanics of Solids	HNME0304	Third Year/Mechanical
185	Manufacturing Processes	MNME0303	Third Year/Mechanical
186	Machine Dynamics Lab - II	PCME7306	Third Year/Mechanical
187	Mechanical Engineering Lab - III	PCME7307	Third Year/Mechanical
188	Manufacturing Technology-II Lab	PCME7308	Third Year/Mechanical
189	Design of Machine Components	HNME0305	Third Year/Mechanical
190	Product Design and Production Tooling	PCME43010	Third Year/Mechanical
191	Machine Design-I	PCME4309	Third Year/Mechanical
192	Advanced Mechanics of Material	PEME5304	Third Year/Mechanical
193	Mechanics of Solid	MNME0304	Third Year/Mechanical
194	Machine Design Lab	PCME7309	Third Year/Mechanical
195	Advanced Manufacturing Lab	PCME7310	Third Year/Mechanical
196	Business Communication & Interview Skills	HSHM3305	Third Year/Mechanical
198	Mechanical Measurement and Control	PEME5305	Third Year/Mechanical
199	Machine Conditioning Monitoring	PEME5306	Third Year/Mechanical
200	Heat and Mass Transfer	PCME4411	Fourth Year/Mechanical
201	Mechanical Handling Equipment	PCME4412	Fourth Year/Mechanical
202	Mechatronic	PEME5407	Fourth Year/Mechanical
203	CAD, CAM & Robotics	PEME5410	Fourth Year/Mechanical
204	Computational Fluid Dynamics	HNME0410	Fourth Year/Mechanical
205	Machine Dynamics	MNME0405	Fourth Year/Mechanical
207	Ergonomics and Human Factor Engineering	PEME541	Fourth Year/Mechanical
208	Engineering Tribology	PEME5416	Fourth Year/Mechanical
210	Gas Dynamics	HNME0411	Fourth Year/Mechanical
211	Finite Element Method	HNME0412	Fourth Year/Mechanical
212	Machine Design - II	PEME5411	Fourth Year/Mechanical
213	Project Management	PEME5412	Fourth Year/Mechanical
214	Automobile Engineering	PEME5417	Fourth Year/Mechanical
215	Optimization in Engineering	PEME5418	Fourth Year/Mechanical
216	Reverse Engineering and Rapid Prototyping	PEME5408	Fourth Year/Mechanical
217	Refrigeration and Air conditioning	PEME5409	Fourth Year/Mechanical
218	Applied Mathematics	BSMA1208	Second year/Chemical
219	Material Science and Engineering	ESMT2214	Second year/Chemical
220	Chemical Process Calculation	PCCH4201	Second year/Chemical
221	Mechanical Operations	PCCH4202	Second year/Chemical
222	Fundamentals of Unit Operations	HNCH201	Second year/Chemical
223	Engineering Chemistry	MNCH0201	Second year/Chemical
224	Mechanical Operation Laboratory	PCCH7201	Second year/Chemical
225	Basic Chemical Engineering Laboratory	PCCH7202	Second year/Chemical
226	Heat Transfer	PCCH4203	Second year/Chemical
227	Mass Transfer- I	PCCH4204	Second year/Chemical
228	Fluid Dynamics	PCCH4205	Second year/Chemical
229	Advanced Fluid Dynamics	HNCH202	Second year/Chemical
230	Application of Material Science	MNCH202	Second year/Chemical
231	Fluid Dynamics Lab	PCCH7203	Second year/Chemical
232	Mass Transfer lab	PCCH7204	Second year/Chemical
233	Heat Dynamics Lab	PCCH7205	Second year/Chemical
234	Mass Transfer - II	PCCH4306	Third Year/Chemical
235	Chemical Reaction Engineering-I	PCCH4307	Third Year/Chemical
236	Chemical Process Technology	PCCH4308	Third Year/Chemical
237	Fuel and Energy Technology	PECH5301	Third Year/Chemical
238	Bio-Chemical Engineering	PECH5302	Third Year/Chemical
239	Advanced Mass Transfer	HNCH0303	Third Year/Chemical
240	Fuel Cell Technology	MNCH303	Third Year/Chemical
241	Fuel Technology Laboratory	PCCH7306	Third Year/Chemical
242	Chemical Reaction Engineering Laboratory	PCCH7307	Third Year/Chemical
243	Chemical Technology Laboratory	PCCH7308	Third Year/Chemical
244	Chemical Reaction Engineering-II	PCCH4309	Third Year/Chemical
245	Process Dynamics and Control	PCCH4310	Third Year/Chemical


Deputy Registrar
 Indira Gandhi Institute of Technology
 Sarang, Dhenkanal-759146

246	Chemical Engineering Mathematics and MATL	PECH5303	Third Year/Chemical
247	Waste to Energy Conversion	PECH5304	Third Year/Chemical
248	Advanced Process Control	HNCH304	Third Year/Chemical
249	Membrane Science and Engineering	MNCH304	Third Year/Chemical
250	CAD Laboratory	PCCH7309	Third Year/Chemical
251	Process Control Laboratory	PCCH7310	Third Year/Chemical
253	Process Equipment Design	PCCH4411	Fourth Year/Chemical
254	Transport Phenomena	PCCH4412	Fourth Year/Chemical
255	Chemical Engineering Thermodynamics	PECH5405	Fourth Year/Chemical
256	Computational Fluid Dynamics	PECH546	Fourth Year/Chemical
257	Process Instrumentation	PECH5407	Fourth Year/Chemical
258	Process Simulation and Modeling	PECH5408	Fourth Year/Chemical
259	Advanced Heat Transfer	HNCH0405	Fourth Year/Chemical
260	Environmental Pollution Control	MNCH0405	Fourth Year/Chemical
261	Seminar and Technical Paper Writing	PJCH8403	Fourth Year/Chemical
262	Separation Technology	PECH5409	Fourth Year/Chemical
263	Fertilizer Technology	PECH5410	Fourth Year/Chemical
264	Plant Design and Economics	PECH5411	Fourth Year/Chemical
265	Pulp and Paper Technology	PECH5412	Fourth Year/Chemical
267	Analog Electronic Circuits	ESEC2213	Second Year/ CSE
268	Data Structure Using C++	PCCS4201	Second Year/ CSE
269	Digital Logic Design	PCCS4202	Second Year/ CSE
270	Software Engineering	HNCS0201	Second Year/ CSE
271	OOPs using C++	MNCS0201	Second Year/ CSE
272	Data Structure Using C++ Lab	PCCS7201	Second Year/ CSE
273	Digital Logic Design Lab	PCCS7202	Second Year/ CSE
274	Object Oriented Programming using JAVA	PCCS4203	Second Year/ CSE
275	Formal Language and Automata Theory	PCCS4204	Second Year/ CSE
276	Database Management System	PCCS4205	Second Year/ CSE
277	Software Testing and Methodology	HNCS0202	Second Year/ CSE
278	OOPs using JAVA	MNCS0202	Second Year/ CSE
279	Java Programming Lab	PCCS7203	Second Year/ CSE
280	Database Management	PCCS7204	Second Year/ CSE
281	Python Programming	PECS7201	Second Year/ CSE
282	C++	PECS7202	Second Year/ CSE
283	Android programming	PECS7203	Second Year/ CSE
284	Design and Analysis of Algorithm	PCCS4306	Third year/CSE
285	Computer Networks	PCCS4307	Third year/CSE
286	Microprocessor and Micro Controller	PCCS4308	Third year/CSE
287	Computer System Architecture	PECS5301	Third year/CSE
288	Embedded System Design	PECS5302	Third year/CSE
289	Graph Theory	PECS5303	Third year/CSE
290	Software Architecture	HNCS0303	Third year/CSE
291	Database Management System	MNCS0303	Third year/CSE
292	Design & Analysis of Algorithm Lab	PCCS7305	Third year/CSE
293	Computer Networks Lab	PCCS7306	Third year/CSE
294	Microprocessor and Micro Controller Lab	PCCS7307	Third year/CSE
296	Compiler Design	PCCS4310	Third year/CSE
297	Machine Learning Techniques	PECS5304	Third year/CSE
298	Soft Computing	PECS5305	Third year/CSE
299	Cryptography and Network Security	PECS5306	Third year/CSE
300	Software Quality Management	HNCS0304	Third year/CSE
301	Computer Networks	MNCS0304	Third year/CSE
302	Operating System Lab	PCCS7308	Third year/CSE
303	Compiler Design Lab	PCCS7309	Third year/CSE
304	Skill Project	PJCS8301	Third year/CSE
305	Software Engineering	PCCS4411	Fourth Year/CSE
306	Artificial Intelligence and Expert Systems	PCCS4412	Fourth Year/CSE
307	Parallel and Distributed System	PECS5407	Fourth Year/CSE


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Sarang, Dhenkanal-759146


308	Fault Tolcrant Systems	PECS5408	Fourth Year/CSE
309	Statistical Natural Language Processing	PECS5409	Fourth Year/CSE
310	Computer Graphics	PECS5410	Fourth Year/CSE
311	Digital Image Processing	PECS5411	Fourth Year/CSE
312	Data Analytics	PECS5412	Fourth Year/CSE
313	Software Development for Portable Devices	HNCS0405	Fourth Year/CSE
314	Operating System	MNCS0405	Fourth Year/CSE
316	Internet and Web Technology	PECS5413	Fourth Year/CSE
317	Social Network Analysis	PECS5414	Fourth Year/CSE
318	Semantic and Text Processing	PECS5415	Fourth Year/CSE
319	Software Project Management	PECS5416	Fourth Year/CSE
320	Bioinformatics	PECS5417	Fourth Year/CSE
321	Real Time Systems	PECS5418	Fourth Year/CSE
323	Signals and Systems	PCEC4201	Second Year/ETC
324	Network Theory	PCEC4202	Second Year/ETC
325	Probability Theory & Random Processes	HNEC0201	Second Year/ETC
326	Elements of Embedded System Design	MNEC0201	Second Year/ETC
327	Analog Electronic Circuits Lab	PCEC7201	Second Year/ETC
328	Network Theory Lab	PCEC7202	Second Year/ETC
329	Digital Electronics	PCEC4203	Second Year/ETC
330	Embedded Systems	PCEC4204	Second Year/ETC
331	Electromagnetic Theory	PCEC4205	Second Year/ETC
332	Digital Audio and Video Engineering	HNEC0202	Second Year/ETC
333	Fundamentals of Digital Design	MNEC0202	Second Year/ETC
334	Digital Design Lab	PCEC7203	Second Year/ETC
335	Embedded Systems Lab	PCEC7204	Second Year/ETC
336	Electromagnetic Engineering and Simulation Lab	PCEC7205	Second Year/ETC
337	Communication Engineering	PCEC4306	Third year/ETC
338	Digital Signal Processing	PCEC4307	Third year/ETC
339	VLSI Design	PCEC4308	Third year/ETC
340	Machine Learning	HNEC0303	Third year/ETC
341	Principles of Communication Engineering	MNEC0303	Third year/ETC
342	Communication Engineering Lab	PCEC7306	Third year/ETC
343	Digital Signal Processing Lab	PCEC7307	Third year/ETC
344	VLSI Design Lab	PCEC7308	Third year/ETC
345	Control System	PCEC4309	Third year/ETC
346	Microwave Engineering	PCEC4310	Third year/ETC
347	Cognitive Radio	HNEC0304	Third year/ETC
348	Computer Network and Data Communication	MNEC0304	Third year/ETC
349	Control and Instrumentation Lab	PCEC7309	Third year/ETC
350	Microwave Engineering Lab	PCEC7310	Third year/ETC
352	Mobile Communication and Networks	PCEC4411	Fourth Year/ETC
353	Internet of Things	PCEC4412	Fourth Year/ETC
354	Wireless Access Technology	HNEC0405	Fourth Year/ETC
355	Mobile Communication and Networks	MNEC0405	Fourth Year/ETC
357	Satellite Communication	PEEC5410	Fourth Year/ETC
358	Digital Image Processing	PEEC5415	Fourth Year/ETC
359	Wireless Sensor Networks	PEEC5418	Fourth Year/ETC
360	Multimedia Communication	PEEC5424	Fourth Year/ETC
362	Metallurgical Thermodynamics and Kinetics	PCMT4201	Second Year/ MME
363	Transport Phenomena	PCMT4202	Second Year/ MME
364	Physics of Materials	HNMT0201	Second Year/ MME
365	Introduction to Physical Metallurgy	MNMT0201	Second Year/ MME
366	Metallography Laboratory	PCMT7201	Second Year/ MME
367	Metallurgical Analysis Laboratory	PCMT7202	Second Year/ MME
368	Phase Transformations	PCMT4203	Second Year/ MME
369	Deformation Behaviour of Materials	PCMT4204	Second Year/ MME
370	Materials Processing	PCMT4205	Second Year/ MME
371	Diffusion in Materials	HNMT0202	Second Year/ MME
372	Metallurgical Thermodynamics and Kinetics	MNMT0202	Second Year/ MME
373	Mechanical Metallurgy Laboratory	PCMT7203	Second Year/ MME

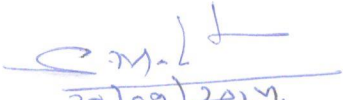

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 Indira Gandhi Institute of Technology
 Sarang, Dhenkanal-759146

374	Transport Phenomena Laboratory	PCMT7204	Second Year/ MME
375	Materials Processing Laboratory	PCMT7205	Second Year/ MME
376	Physical Metallurgy	PCMT4306	Third year/MME
377	Iron Making	PCMT4307	Third year/MME
378	Non-Ferrous Extractive Metallurgy	PCMT4308	Third year/MME
379	Mineral Processing	PEMT5301	Third year/MME
380	Material Failure and Analysis	HNMT0303	Third year/MME
381	Mechanical Metallurgy	MNMT0303	Third year/MME
382	Heat Treatment Laboratory	PCMT7306	Third year/MME
383	Process Metallurgy Laboratory	PCMT7307	Third year/MME
384	Mineral Processing & Fuel Testing Laboratory	PCMT7308	Third year/MME
385	Fuel Technology	PEMT5302	Third year/MME
386	Refractories and Furnaces	PEMT5303	Third year/MME
387	Steel Making	PCMT4309	Third year/MME
388	Mechanical Working & Testing of Materials	PCMT4310	Third year/MME
389	Instrumental Methods of Analysis	PEMT5304	Third year/MME
390	Non Destructive Testing of Materials	PEMT5305	Third year/MME
391	Polymer Technology	PEMT5306	Third year/MME
392	Secondary Steel Making	HNMT0304	Third year/MME
393	Iron Making & Steel Making	MNMT0304	Third year/MME
394	Advanced Materials Processing Laboratory	PCMT7309	Third year/MME
395	Computer Application in Metallurgy	PCMT7310	Third year/MME
397	X-Ray and Electron Microscopy	PCMT4411	Fourth Year/MME
398	Materials for Structural Applications	PCMT4412	Fourth Year/MME
399	Solidification and Casting Processes	PEMT5407	Fourth Year/MME
400	Corrosion & Degradation of Materials	PEMT5410	Fourth Year/MME
401	Tribology of Materials	HNMT0405	Fourth Year/MME
402	Advanced Materials and Processes	MNMT0405	Fourth Year/MME
404	Joining of Materials	PEMT5408	Fourth Year/MME
405	Powder Metallurgy	PEMT5409	Fourth Year/MME
406	Electrometallurgy	PEMT5411	Fourth Year/MME
407	Surface Engineering	PEMT5412	Fourth Year/MME
408	Dislocation Theory	PEMT5413	Fourth Year/MME
409	Alternative Routes of Iron Making	PEMT5416	Fourth Year/MME
411	Non-Metallic Materials	PEMT5414	Fourth Year/MME
412	Functional Materials	PEMT5415	Fourth Year/MME
413	Ferro-Alloy Technology	PEMT5417	Fourth Year/MME
414	Fatigue and Fracture Mechanics	PEMT5418	Fourth Year/MME
415	Strength of Material	PCPD4201	Second Year/Production
416	Casting & Welding Technology	PCPD4202	Second Year/Production
417	Surface Engineering	HNP0201	Second Year/Production
418	Basic Manufacturing Processes	MNPD0201	Second Year/Production
419	Material Testing Lab	PCPD7201	Second Year/Production
420	Manufacturing Lab	PCPD7202	Second Year/Production
421	Machining Technology	PCPD4203	Second Year/Production
422	Design of Machine Element	PCPD4204	Second Year/Production
423	Theory of Machines	PCPD4205	Second Year/Production
424	Non Destructive Testing	HNP0202	Second Year/Production
425	Non Traditional Machining	MNPD0202	Second Year/Production
426	Machining Technology Lab	PCPD7203	Second Year/Production
427	Theory of Machine Lab	PCPD7204	Second Year/Production
428	Design of Machine Element Sessional	PCPD7205	Second Year/Production
429	Metal Forming Technology	PCPD4306	Third Year/ Production
430	Tool Design	PCPD4307	Third Year/ Production
431	Metrology & Inspection	PCPD4308	Third Year/ Production
432	Fluid Mechanics & Hydraulic Machine	PEPD5301	Third Year/ Production
433	Advanced Casting & Welding	HNP0303	Third Year/ Production
434	CAD/CAM	MNPD0303	Third Year/ Production
435	Metal Forming Lab	PCPD7306	Third Year/ Production
436	Tool Design Sessional	PCPD7307	Third Year/ Production
437	Metrology & Inspection Lab	PCPD7308	Third Year/ Production
438	Hydraulics & Pneumatics	PEPD5302	Third Year/ Production


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 Indira Gandhi Institute of Technology
 Sarang, Dhenkanal-759146

439	Tribology in Design and Manufacturing	PEPD5303	Third Year/ Production
440	CAD/CAM	PCPD4309	Third Year/ Production
441	Advanced Machining Technology	PCPD4310	Third Year/ Production
442	Theory of Plastic Deformation	HNPD0304	Third Year/Production
443	Robotics & Robot Application	MNPD0304	Third Year/Production
444	CAD/CAM Lab	PCPD7309	Third Year/Production
445	Advanced Machining Lab	PCPD7310	Third Year/Production
447	Production & Operation Management	PCPD4411	Fourth Year/Production
448	Robotics and FMS	PCPD4412	Fourth Year/Production
449	Heat Power Engineering	PEPD5407	Fourth Year/Production
450	Non-Conventional Source of Energy	PEPD5410	Fourth Year/Production
451	Design of Automated Material Handling System	HNPD0405	Fourth Year/Production
452	Quality Engineering	MNPD0405	Fourth Year/Production
454	Additive Manufacturing	PEPD5413	Fourth Year/Production
455	Industrial Automation & Mechatronics	PEPD5416	Fourth Year/Production
457	Design and Analysis of Experiment	PEPD5411	Fourth Year/Production
458	Computer Integrated Manufacturing	PEPD5412	Fourth Year/Production
459	Power Plant Engineering	PEPD5408	Fourth Year/Production
460	Automobile Engineering	PEPD5409	Fourth Year/Production
461	Lean Manufacturing	PEPD5414	Fourth Year/Production
462	Supply Chain Management	PEPD5415	Fourth Year/Production
463	Automated Material Handling System	PEPD5417	Fourth Year/Production
464	Diagnostics Techniques	PEPD5418	Fourth Year/Production
465	Major Project	PJPD8405	Fourth Year/Production
466	Minor Project	PJMT8402	Fourth Year/MME
467	Internship	PJMT8404	Fourth Year/MME


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NAAC: 1.2.2: List of New Courses P.G.

Sl.No.	Course Title	Course Cod	Year/Specialization
1	Transportation Infrastructure Design	TRC101	First Year/Transportation
2	Pavement Material Characterization	TRC102	First Year/Transportation
3	Traffic Engineering & Management	TRE101	First Year/Transportation
4	Urban Transportation Policy Planning for Sustainable Development	TRE102	First Year/Transportation
5	Airport Planning & Design	TRE103	First Year/Transportation
6	Economic Evaluation of Transportation System	TRE104	First Year/Transportation
7	Analysis of Transportation system	TRE105	First Year/Transportation
8	Advanced Numerical Method	TRE106	First Year/Transportation
9	Research Methodology & Intellectual Property Rights	GHM101	First Year/Transportation
10	Pavement Material Laboratory	TRC103	First Year/Transportation
12	Analysis and Design of Pavement	TRC201	First Year/Transportation
13	Fundamentals of Traffic Flow Theory	TRC202	First Year/Transportation
14	Highway Construction Practice	TRE201	First Year/Transportation
15	Remote Sensing & GPS for Transportation Engineering	TRE202	First Year/Transportation
16	Advanced Railway Engineering	TRE203	First Year/Transportation
17	Optimization Methods & its application in Civil Engineering	TRE204	First Year/Transportation
18	Ground Improvement Technique	TRE205	First Year/Transportation
19	Highway Project Formulation & Evaluation	TRE206	First Year/Transportation
21	Transportation Engineering Design Practice	TRJ202	First Year/Transportation
22	Intelligent Transportation system	TRE301	Second Year/Transportation
23	Environmental Impact Assessment	TRE302	Second Year/Transportation
24	Bridge Engineering	TRE303	Second Year/Transportation
25	Business Analytics	OHM301	Second Year/Transportation
26	Industrial Safety	OME301	Second Year/Transportation
27	Operations Research	OMA301	Second Year/Transportation
28	Cost Management of Engineering Projects	OCE302	Second Year/Transportation
29	Composite Materials	OMT301	Second Year/Transportation
30	Waste to Energy	OCE301	Second Year/Transportation
31	Internet of Things	OEC301	Second Year/Transportation
32	Soft Computing	OEC302	Second Year/Transportation
33	Project Engineering & Management	OEC303	Second Year/Transportation
34	Start-up & Entrepreneurship Development	OME302	Second Year/Transportation
35	Water Supply Engineering	ENC101	First Year/Environmental
36	Waste water Engineering	ENC102	First Year/Environmental
37	Environmental Chemistry & Microbiology	ENE101	First Year/Environmental
38	Environmental Law, Regulation & Policy	ENE102	First Year/Environmental
39	Environmental Economics	ENE103	First Year/Environmental
40	Advanced Water & Wastewater Treatment	ENE104	First Year/Environmental
41	Rural Water Supply and Sanitation	ENE105	First Year/Environmental
42	Environmental Ecology	ENE106	First Year/Environmental
43	Environmental Monitoring Lab 1	ENC103	First Year/Environmental
44	Environmental Engineering Design 1	ENC104	First Year/Environmental


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 Indira Gandhi Institute of Technology
 Sarang, Dhenkanal-759146


45	Air & Noise Pollution	ENC201	First Year/Environmental
46	Solid Waste Management	ENC202	First Year/Environmental
47	Hazardous Waste Management	ENE201	First Year/Environmental
48	Industrial Pollution Control	ENE202	First Year/Environmental
49	Occupational Health and Safety	ENE203	First Year/Environmental
50	Environmental Hydraulics	ENE204	First Year/Environmental
51	Engineering Hydrology	ENE205	First Year/Environmental
52	Application of Remote Sensing	ENE206	First Year/Environmental
53	Environmental Monitoring Lab 2	ENC203	First Year/Environmental
54	Environmental Engineering Design 2	ENC204	First Year/Environmental
56	Environmental Impact Assessment	ENE301	Second Year/Environmental
57	Environmental Management	ENE302	Second Year/Environmental
58	Numerical Methods and Modelling	ENE303	Second Year/Environmental
59	Theory of Elasticity and Plasticity	STC101	First Year/Structural
60	Finite Element Analysis and its Applications	STC102	First Year/Structural
61	Advanced Steel Structures	STE101	First Year/Structural
62	Structural Dynamics	STE102	First Year/Structural
63	Prestressed Concrete	STE103	First Year/Structural
64	Advanced Numerical Methods	STE104	First Year/Structural
65	Repair & Rehabilitation of Structures	STE105	First Year/Structural
66	Elastic Stability & Behavior of Metals	STE106	First Year/Structural
67	Advanced Concrete Lab I	STC103	First Year/Structural
68	Computational Lab-I	STC104	First Year/Structural
69	Advanced Reinforced Concrete Design	STC201	First Year/Structural
70	Theory of Plates & Shells	STC202	First Year/Structural
71	Mechanics of Composite Materials	STE201	First Year/Structural
72	Bridge Engineering	STE202	First Year/Structural
73	Earthquake Resistance Design	STE203	First Year/Structural
74	Advanced Construction Materials	STE204	First Year/Structural
75	Optimization Methods & its application in Civil Engineering	STE205	First Year/Structural
76	Tall Structures	STE206	First Year/Structural
77	Advanced structural Lab – II	STC203	First Year/Structural
80	Disaster Management and Mitigation	STE301	Second Year/ Structural
81	Non-conventional Energy	STE302	Second Year/ Structural
82	Project Planning	STE303	Second Year/ Structural
83	Theory of Elasticity and Plasticity	GTC101	First year/ Geotechnical
84	Fundamentals of Soil Behaviour	GTC102	First year/ Geotechnical
85	Advanced Foundation Engineering	GTE101	First year/ Geotechnical
86	Soil Structure Interaction	GTE102	First year/ Geotechnical
87	Foundation on Expansive Soils	GTE103	First year/ Geotechnical
88	Earth Retaining Structures	GTE104	First year/ Geotechnical
89	Optimization Methods	GTE105	First year/ Geotechnical
90	Advanced Numerical Methods	GTE106	First year/ Geotechnical
91	Geotechnical Engineering Laboratory	GTC103	First year/ Geotechnical
92	Computational Geo-techniques Laboratory	GTC104	First year/ Geotechnical
93	Advanced Geo-Mechanics	GTC201	First year/ Geotechnical
94	Finite Elements in Geo-Mechanics	GTC202	First year/ Geotechnical
95	Soil Dynamics & Geotechnical Earthquake Engineering	GTE201	First year/ Geotechnical
96	Stability Analysis	GTE202	First year/ Geotechnical
97	Subsoil Exploration and Soil Testing	GTE203	First year/ Geotechnical


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98	Reinforced Soil Structures	GTE204	First year/ Geotechnical
99	Rock Mechanics	GTE205	First year/ Geotechnical
100	Ground Improvement Technique	GTE206	First year/ Geotechnical
102	Geotechnical Engg Design Practice	GTJ202	First year/ Geotechnical
104	Ground Water and Flow through Porous Media	GTE301	Second year/ Geotechnical
105	Project Planning and Construction Management	GTE302	Second year/ Geotechnical
106	Geo-environmental Engineering	GTE303	Second year/ Geotechnical
107	Power System Analysis	PSC101	First Year/ PSE
108	Power System Dynamics-I	PSC102	First Year/ PSE
109	Renewable Energy System	PSE101	First Year/ PSE
110	Smart Grids	PSE102	First Year/ PSE
111	High Power Converters	PSE103	First Year/ PSE
112	Electrical Power Distribution System	PSE104	First Year/ PSE
113	Pulse Width Modulation for PE Converters	PSE105	First Year/ PSE
114	Electric and Hybrid Vehicles	PSE106	First Year/ PSE
115	Power System Lab	PSC103	First Year/ PSE
116	Renewable Energy Lab	PSC104	First Year/ PSE
117	Digital Protection of Power System	PSC201	First Year/ PSE
118	Power System Dynamics-II	PSC202	First Year/ PSE
119	Restructured Power Systems	PSE201	First Year/ PSE
120	Advanced Digital Signal Processing	PSE202	First Year/ PSE
121	Power Apparatus Design	PSE203	First Year/ PSE
122	SCADA System and Applications	PSE204	First Year/ PSE
123	Power Quality	PSE205	First Year/ PSE
124	Artificial Intelligence Techniques	PSE206	First Year/ PSE
125	Power System Lab-II	PSC203	First Year/ PSE
126	Power Electronics and Applications Lab	PSC204	First Year/ PSE
128	Power System Transients	PSE301	Second Year/ PSE
129	FACTS and Custom Power Devices	PSE302	Second Year/ PSE
130	Industrial Load Modelling and Control	PSE303	Second Year/ PSE
131	Power Electronics Converters	PEC101	First Year/PED
132	Modeling and Analysis of Electrical Machines	PEC102	First Year/PED
133	Industrial Load Modeling and Control	PEE101	First Year/PED
134	Optimal and Adaptive Control	PEE102	First Year/PED
135	Power Quality	PEE103	First Year/PED
136	Static VAR Controllers and Harmonic Filtering	PEE104	First Year/PED
137	PWM converter	PEE105	First Year/PED
138	Power Semiconductor Devices	PEE106	First Year/PED
139	Power Electronics Laboratory	PEC103	First Year/PED
140	Electrical Machines Laboratory	PEC104	First Year/PED
141	Electric Drives System	PEC201	First Year/PED
142	Digital Control of Power Electronic and Drive	PEC202	First Year/PED
143	Switched Mode and Resonant Converters	PEE201	First Year/PED
144	Advanced Power Electronic	PEE202	First Year/PED
145	Advanced Digital Signal Processing	PEE203	First Year/PED
146	Advanced Microcontroller Systems	PEE204	First Year/PED
147	Distributed Generation	PEE205	First Year/PED


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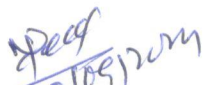
148	Smart Grids	PEE206	First Year/PED
149	Electrical Drives Laboratory	PEC203	First Year/PED
150	Digital Signal Processing Lab	PEC204	First Year/PED
152	SCADA Systems and Applications	PEE301	Second Year/PED
153	FACTS and Custom Power Devices	PEE302	Second Year/PED
154	High Voltage DC Transmission	PEE303	Second Year/PED
155	Advanced Electric Drives	PEE304	Second Year/PED
156	Power Electronics Converters	IPC101	First Year/IPCD
157	Power System Analysis	IPC102	First Year/IPCD
158	Modelling and Analysis of Electrical Machines	IPE101	First Year/IPCD
159	Optimization Techniques	IPE102	First Year/IPCD
160	Smart Grids	IPE103	First Year/IPCD
161	Electric and Hybrid Vehicles	IPE104	First Year/IPCD
162	Non-Conventional Electrical Energy	IPE105	First Year/IPCD
163	Advanced Digital Signal Processing	IPE106	First Year/IPCD
164	Power System Lab	IPC103	First Year/IPCD
165	Electrical Machines Laboratory	IPC104	First Year/IPCD
166	Digital Protection of Power System	IPC201	First Year/IPCD
167	Electric Drives System	IPC202	First Year/IPCD
168	Advanced Microcontroller Systems	IPE201	First Year/IPCD
169	Industrial Load Modelling	IPE202	First Year/IPCD
170	FACTS and Custom Power Devices	IPE203	First Year/IPCD
171	SCADA System and Applications	IPE204	First Year/IPCD
172	Power Quality	IPE205	First Year/IPCD
173	Advanced Control System	IPE206	First Year/IPCD
174	Electric Drives Lab	IPC203	First Year/IPCD
175	Advance Control System Lab	IPC204	First Year/IPCD
177	Power System Transients	IPE301	Second Year/IPCD
178	Reliability Analysis and Protection	IPE302	Second Year/IPCD
179	High Voltage DC Transmission	IPE303	Second Year/IPCD
180	Distributed Generation	ESC101	First Year/ESE
181	Renewable Energy Systems	ESC102	First Year/ESE
182	Engineering Optimization	ESE101	First Year/ESE
183	Power System Dynamics	ESE102	First Year/ESE
184	High Voltage Engineering	ESE103	First Year/ESE
185	Switched Mode Power Control	ESE104	First Year/ESE
186	Optimal and Adaptive Control	ESE105	First Year/ESE
187	FACTS and Custom Power Devices	ESE106	First Year/ESE
188	Power Systems Lab-I	ESC103	First Year/ESE
189	Renewable Energy lab	ESC104	First Year/ESE
190	Digital Power System Protection	ESC201	First Year/ESE
191	Non-Conventional Electrical Energy	ESC202	First Year/ESE
192	Artificial Intelligence Techniques	ESE201	First Year/ESE
193	Smart Grids	ESE202	First Year/ESE
194	Energy Conversion Processes	ESE203	First Year/ESE
195	Electric and Hybrid Vehicles	ESE204	First Year/ESE
196	Power Quality	ESE205	First Year/ESE
197	Industrial Load Modeling and Control	ESE206	First Year/ESE
198	Power System Lab-II	ESC203	First Year/ESE
199	Energy Systems Simulation Lab	ESC204	First Year/ESE
201	Power System Analysis	ESE301	Second Year/ESE


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 Indira Gandhi Institute of Technology
 Sarang, Dhenkanal-759146


202	Power system Transients	ESE302	Second Year/ESE
203	Reliability Analysis	ESE303	Second Year/ESE
204	Thermodynamics & combustion	THC101	First year/ Thermal
205	I.C.Engine Combustion and Pollution	THC102	First year/ Thermal
206	Power Plant Engineering	THE101	First year/ Thermal
207	Energy system and management	THE102	First year/ Thermal
208	Advanced Refrigeration and Air Conditioning	THE103	First year/ Thermal
209	Optimization Methods in Engineering	THE104	First year/ Thermal
210	Gas Turbines & Jet Propulsion	THE105	First year/ Thermal
211	Incompressible & Compressible Flows	THE106	First year/ Thermal
212	Thermal Energy systems lab	THC103	First year/ Thermal
214	Advanced Heat Transfer	THJ101	First year/ Thermal
215	Renewable Energy Sources	THC201	First year/ Thermal
216	Design of heat Transfer equipments	THC202	First year/ Thermal
217	Computational Method in thermal engineering	THE201	First year/ Thermal
218	Alternative fuels	THE202	First year/ Thermal
219	Convective Heat Transfer	THE203	First year/ Thermal
220	Measurements in Thermal Engineering	THE204	First year/ Thermal
221	Fundamentals of combustion	THE205	First year/ Thermal
222	Heat Transfer lab	THC203	First year/ Thermal
225	Steam Engineering	THE301	Second Year/Thermal
226	Design of solar and wind system	THE302	Second Year/Thermal
227	Cryogenics	THE303	Second Year/Thermal
228	Theory of Plasticity and Metal Forming Process	PRC101	First Year/Production
229	Theory of Machining	PRC102	First Year/Production
230	Advanced Casting & Welding	PRE101	First Year/Production
231	Machine Tool Technology	PRE102	First Year/Production
232	Tools and Dies Design	PRE103	First Year/Production
233	Robotics and Flexible Manufacturing	PRE104	First Year/Production
234	Computer Aided Design	PRE105	First Year/Production
235	Mechatronics	PRE106	First Year/Production
236	Metal Forming & Machining Lab	PRC103	First Year/Production
238	Non-Traditional Manufacturing Process	PRC201	First Year/Production
239	Industrial Engineering	PRC202	First Year/Production
240	Inspection and Quality Assurance	PRE201	First Year/Production
241	Finite Element Methods	PRE202	First Year/Production
242	Soft Computing	PRE203	First Year/Production
243	Operation Management	PRE204	First Year/Production
244	Human Resource Management	PRE205	First Year/Production
245	Inventory System	PRE206	First Year/Production
246	Non-Traditional Manufacturing Process Lab	PRC203	First Year/Production
247	Industrial Engineering and Ergonomics Lab	PRC204	First Year/Production
249	Rapid Prototyping	PRE301	Second Year/Production
250	Nanotechnology	PRE302	Second Year/Production
251	Concurrent Engineering	PRE303	Second Year/Production
252	Advanced Mechanics of Solids	MSC101	First Year/MSD
253	Mechanical Vibration Analysis	MSC102	First Year/MSD
254	Fatigue, Creep & Fracture	MSE101	First Year/MSD
255	Automatic Control System	MSE102	First Year/MSD


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 Indira Gandhi Institute of Technology
 Barang, Dhenkanal-759146


256	Mechatronics	MSE103	First Year/MSD
257	Fault Diagnosis and Condition Monitoring	MSE104	First Year/MSD
258	Theory of Plates and Shells	MSE105	First Year/MSD
259	Robotic Control	MSE106	First Year/MSD
260	Design Lab-I	MSC103	First Year/MSD
261	Seminar-1	MSJ101	First Year/MSD
262	Experimental Stress Analysis	MSC201	First Year/MSD
263	Composite Materials	MSC202	First Year/MSD
264	FEM in Engineering	MSE201	First Year/MSD
265	Advanced Theory of Mechanisms	MSE202	First Year/MSD
266	Product Design	MSE203	First Year/MSD
267	Engineering Tribology	MSE204	First Year/MSD
268	Engineering Design Optimization	MSE205	First Year/MSD
270	Design Lab-II	MSC203	First Year/MSD
273	Applied Elasticity and Plasticity	MSE301	Second Year/MSD
274	Advanced Fluid Mechanics	MSE302	Second Year/MSD
275	Computer Integrated Manufacturing	MSE303	Second Year/MSD
276	Advanced Mass Transfer	CHC101	First Year/ Chemical
277	Advanced Fluid Dynamics	CHC102	First Year/ Chemical
278	Advanced Process Control Chemical Engineering	CHE101	First Year/ Chemical
279	Industrial Pollution Control	CHE102	First Year/ Chemical
280	Chemical Engineering Economics and Plant Design	CHE103	First Year/ Chemical
281	Bioprocess Engineering	CHE104	First Year/ Chemical
282	Polymer Technology	CHE105	First Year/ Chemical
283	Experimental Lab-1	CHC103	First Year/ Chemical
284	Seminar	CHJ101	First Year/ Chemical
285	Advanced Heat Transfer	CHC201	First Year/ Chemical
286	Application of Mathematical and statistical methods	CHC202	First Year/ Chemical
287	Advanced Reaction Engineering	CHE201	First Year/ Chemical
288	Fluidization Engineering	CHE202	First Year/ Chemical
289	Pinch Technology	CHE203	First Year/ Chemical
290	Petroleum Refinery	CHE204	First Year/ Chemical
291	Advanced Separation Technology	CHE205	First Year/ Chemical
292	Computational Fluid Dynamics	CHE206	First Year/ Chemical
293	Experimental Lab-2	CHC203	First Year/ Chemical
296	Principles of Extractive Metallurgy	IMC101	First Year/MME
297	Advanced Metallurgical Thermodynamics and Kinetics	MMC102	First Year/MME
298	Advances in Iron and Steel Making	IME101	First Year/MME
299	Composite Materials	IME102	First Year/MME
300	High Temperature Materials	IME103	First Year/MME
301	Mineral Beneficiation	IME104	First Year/MME
302	Non Ferrous Extractive Metallurgy	IME105	First Year/MME
303	Theory and Practice of Sintering	IME106	First Year/MME
304	Extractive Metallurgy Lab	IMC102	First Year/MME
305	Mineral Beneficiation Lab	IMC103	First Year/MME
306	Advanced Casting Processes	IMC201	First Year/MME
307	Characterization of Materials	MMC202	First Year/MME
308	Non Destructive Testing	IME201	First Year/MME


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 Indira Gandhi Institute of Technology
 Sarang, Dhenkanal-759146

309	Powder Metallurgy	IME202	First Year/MME
310	Mechanical Working of Materials	IME203	First Year/MME
311	Electrochemistry and Corrosion	IME204	First Year/MME
312	Tribology of Materials	IME204	First Year/MME
313	Industrial Heat Treatment	MME206	First Year/MME
314	Materials Characterization Lab.	IME205	First Year/MME
315	Advanced Materials Processing Lab	IMC202	First Year/MME
317	Modelling and Computer Application in Metallurgy	MME301	Second Year/MME
318	Physics of Materials	MME302	Second Year/MME
319	Energy conservation	MME303	Second Year/MME
320	Industrial Heat Treatment	IME206	First Year/IM
322	Pollution control and waste management	IME301	Second Year/IM
323	Secondary Steel Making	IME302	Second Year/IM
324	Surface Engineering	IME303	Second Year/IM
325	Advance Data Structure & Algorithms	CSC101	First Year/CSE
326	Advance Computer Architecture	CSC102	First Year/CSE
327	Computational Methods & Techniques	CSE101	First Year/CSE
328	Machine Learning	CSE102	First Year/CSE
329	Computational Intelligence	CSE103	First Year/CSE
330	Advance Operating System	CSE104	First Year/CSE
331	Advance Real-time Systems	CSE105	First Year/CSE
332	Distributed Operating System	CSE106	First Year/CSE
333	Advance Computing Lab	CSC103	First Year/CSE
334	Pre-thesis work & Seminar-1	CSJ101	First Year/CSE
335	Advance Compiler Design	CSC201	First Year/CSE
336	Cryptography & Network Security	CSC202	First Year/CSE
337	Data Mining and Data Warehousing	CSE201	First Year/CSE
338	Distributed Database	CSE202	First Year/CSE
339	Data Analytics	CSE203	First Year/CSE
340	Crowd Sensing	CSE204	First Year/CSE
341	Cloud Computing & Big Data	CSE205	First Year/CSE
342	Wireless Sensor Networks	CSE206	First Year/CSE
343	Technical Report Writing	CSC203	First Year/CSE
346	Advance Software Engineering	CSE301	Second Year/CSE
347	Statistical Natural Language Processing	CSE302	Second Year/CSE
348	Image Processing & Pattern Recognition	CSE303	Second Year/CSE
349	Advanced Communication Techniques	ECC101	First Year/WCT
350	Adaptive Signal Processing	ECC102	First Year/WCT
351	Optical Communication and Network	ECE101	First Year/WCT
352	Internet Of Things	ECE102	First Year/WCT
353	Pattern Recognition and Machine Learning	ECE103	First Year/WCT
354	Modern Radar System	ECE104	First Year/WCT
355	Computational Intelligence	ECE105	First Year/WCT
356	Telecommunication Switching and Network	ECE106	First Year/WCT
357	Data Security and Cryptography	ECE107	First Year/WCT
358	Fiber Optics Devices and Components	ECE108	First Year/WCT
359	Cognitive Radio System	ECE109	First Year/WCT
360	VLSI for Wireless Communication	ECE110	First Year/WCT
361	Satellite Communication System	ECE111	First Year/WCT
362	Wireless Sensor Network	ECE112	First Year/WCT


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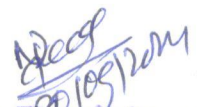
363	Security in Wireless and Mobile Communication	ECE113	First Year/WCT
364	Antenna Theory and Design	ECE114	First Year/WCT
365	Optical Wireless Communication	ECE115	First Year/WCT
366	Mathematics for Communication Engineers	ECE116	First Year/WCT
367	Multimedia Communication	ECE117	First Year/WCT
368	Embedded System Design	ECE118	First Year/WCT
369	MIMO Communication System	ECE119	First Year/WCT
370	Remote Sensing and Advanced Techniques	ECE120	First Year/WCT
371	Advance Communication and Network Lab	ECC103	First Year/WCT
372	Design and Simulation Lab I	ECC104	First Year/WCT
373	Information Theory And Coding	ECC201	First Year/WCT
374	Advanced Wireless Communication	ECC202	First Year/WCT
375	Wireless Sensor Networking Lab	ECC203	First Year/WCT
376	Design And Simulation Lab II	ECC204	First Year/WCT
379	Classical and Relativistic Mechanics	APC101	First Year/MSC Phy
380	Mathematical Methods in Physics	APC102	First Year/MSC Phy
381	Quantum Mechanics-I	APC103	First Year/MSC Phy
382	Solid State Physics	APC104	First Year/MSC Phy
383	Numerical Methods & Computer Programming	APC105	First Year/MSC Phy
384	Electricity and Magnetism Lab	APC106	First Year/MSC Phy
385	Optics Lab	APC107	First Year/MSC Phy
386	Statistical Mechanics	APC201	First Year/MSC Phy
387	Electrodynamics	APC202	First Year/MSC Phy
388	Quantum Mechanics –II	APC203	First Year/MSC Phy
389	Basic Electronics	APC204	First Year/MSC Phy
390	Nano Science and Nanomaterials	APC205	First Year/MSC Phy
391	Basic Electronics Lab	APC206	First Year/MSC Phy
392	Modern Physics Lab	APC207	First Year/MSC Phy
393	Relativistic Quantum Mechanics & Field Theory	APC301	Second Year/MSC Phy
394	Nuclear and Particle Physics	APC302	Second Year/MSC Phy
395	Condensed Matter Physics-I	APE301	Second Year/MSC Phy
396	Nuclear Physics-I	APE302	Second Year/MSC Phy
397	Particle Physics-I	APE303	Second Year/MSC Phy
398	Electronics-I	APE304	Second Year/MSC Phy
399	Advanced Characterization Techniques	APO301	Second Year/MSC Phy
400	Smart & Intelligent Materials	APO302	Second Year/MSC Phy
401	Gravitation, Cosmology and Astrophysics	APO303	Second Year/MSC Phy
402	Non Linear Dynamics	APO304	Second Year/MSC Phy
404	Introduction to SciLAB Lab	APC303	Second Year/MSC Phy
405	Condensed Matter Physics-I Lab	APE305	Second Year/MSC Phy
406	Nuclear Physics-I Lab	APE306	Second Year/MSC Phy
407	Particle Physics-I Lab	APE307	Second Year/MSC Phy
408	Electronics-I Lab	APE308	Second Year/MSC Phy
409	Atomic and Molecular Physics	APC401	Second Year/MSC Phy
410	Condensed Matter Physics-II	APE401	Second Year/MSC Phy
411	Nuclear Physics-II	APE402	Second Year/MSC Phy
412	Particle Physics-II	APE403	Second Year/MSC Phy
413	Electronics-II	APE404	Second Year/MSC Phy
414	Physics of Semiconductor Devices	APO401	Second Year/MSC Phy


Deputy Registrar
 Indira Gandhi Institute of Technology
 Sarana, Dhenkanal-759146

415	Fibre Optics & Optoelectronics Devices	APO402	Second Year/MSC Phy
416	Medical Physics	APO403	Second Year/MSC Phy
417	Vacuum Science Technology	APO404	Second Year/MSC Phy
418	Condensed Matter Physics-II Lab	APE405	Second Year/MSC Phy
419	Nuclear Physics-II Lab	APE406	Second Year/MSC Phy
420	Particle Physics-II Lab	APE407	Second Year/MSC Phy
421	Electronics-II Lab	APE408	Second Year/MSC Phy
422	English for Research Paper Writing	AHM101	Audit Course
423	Disaster Management	AHM102	Audit Course
424	Value Education	AHM103	Audit Course
425	Constitution of India	AHM104	Audit Course
426	Pedagogy Studies	AHM105	Audit Course
427	Stress Management by Yoga	AHM106	Audit Course
428	Personality Development through Life Enlightenment Skills	AHM107	Audit Course
429	Inorganic Chemistry-I	ACC101	First Year/MSC CHEM
430	Organic Chemistry-I	ACC102	First Year/MSC CHEM
431	Physical Chemistry-I	ACC103	First Year/MSC CHEM
432	Quantum Chemistry	ACC104	First Year/MSC CHEM
433	Spectroscopy – I	ACC105	First Year/MSC CHEM
434	Inorganic Chemistry –I Laboratory	ACC106	First Year/MSC CHEM
435	Organic Chemistry Laboratory	ACC107	First Year/MSC CHEM
436	Inorganic Chemistry-II	ACC201	First Year/MSC CHEM
437	Organic Chemistry-II	ACC202	First Year/MSC CHEM
438	Physical Chemistry-II	ACC203	First Year/MSC CHEM
439	Spectroscopy – II	ACC204	First Year/MSC CHEM
440	Bio-chemistry	ACC205	First Year/MSC CHEM
441	Inorganic Chemistry- II Laboratory	ACC206	First Year/MSC CHEM
442	Physical Chemistry-I Laboratory	ACC207	First Year/MSC CHEM
443	C - Programming for Chemist	ACC208	First Year/MSC CHEM
444	Inorganic Chemistry-III	ACC301	Second Year/MSC Chem
445	Organic Chemistry-III	ACC302	Second Year/MSC Chem
446	Environmental Chemistry	ACC303	Second Year/MSC Chem
447	Research Methodology	ACE301	Second Year/MSC Chem
448	Material Science	ACE302	Second Year/MSC Chem
449	Industrial Processes	ACE303	Second Year/MSC Chem
450	Frontiers in Inorganic Chemistry	ACE304	Second Year/MSC Chem
451	Physical Chemistry–II Laboratory	ACC304	Second Year/MSC Chem
452	Environmental Chemistry Laboratory	ACC305	Second Year/MSC Chem
454	Analytical Techniques	ACC401	Second Year/MSC Chem
455	Supramolecular Chemistry	ACC402	Second Year/MSC Chem
456	Medicinal Chemistry	ACE401	Second Year/MSC Chem
457	Chemistry of NanoMaterials	ACE402	Second Year/MSC Chem
458	Chemistry of Natural Products	ACE403	Second Year/MSC Chem
459	Polymer Chemistry	ACE404	Second Year/MSC Chem
460	Nuclear Chemistry	ACE405	Second Year/MSC Chem
461	Heterogeneous Catalysis	ACE406	Second Year/MSC Chem
463	Real Analysis	AMC101	First Year/MSC Mathematics
464	Ordinary Differential Equations	AMC102	First Year/MSC Mathematics
465	Discrete Mathematics	AMC103	First Year/MSC Mathematics
466	Abstract Algebra	AMC104	First Year/MSC Mathematics
467	Linear Algebra	AMC105	First Year/MSC Mathematics


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 Indira Gandhi Institute of Technology
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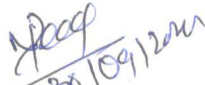
468	Programming using C++ Lab	AMC106	First Year/MSc Mathematics
470	Topology	AMC201	First Year/MSc Mathematics
471	Complex Analysis	AMC202	First Year/MSc Mathematics
472	Numerical Analysis	AMC203	First Year/MSc Mathematics
473	Partial Differential Equations	AMC204	First Year/MSc Mathematics
474	Continuum Mechanics	AMC205	First Year/MSc Mathematics
475	Measure Theory & Integration	AMC206	First Year/MSc Mathematics
476	Lab on Numerical Analysis	AMC207	First Year/MSc Mathematics
477	Functional Analysis	AMC301	Second Year/MSc Mathematics
478	Probability & Stochastic Process	AMC302	Second Year/MSc Mathematics
479	Optimization Techniques	AMC303	Second Year/MSc Mathematics
480	Integral Equations & Calculus of Variations	AMC304	Second Year/MSc Mathematics
481	Fluid Dynamics	AME301	Second Year/MSc Mathematics
482	Number Theory & Cryptography	AME302	Second Year/MSc Mathematics
483	Computational Finance	AME303	Second Year/MSc Mathematics
484	Relational Data Base Management System	AME304	Second Year/MSc Mathematics
485	Introduction to MATLAB (Lab)	AMC305	Second Year/MSc Mathematics
487	Differential Geometry	AMC401	Second Year/MSc Mathematics
488	Matrix Computation	AMC402	Second Year/MSc Mathematics
489	Computational Fluid Dynamics	AME401	Second Year/MSc Mathematics
490	Theory of Computation	AME402	Second Year/MSc Mathematics
491	Finite Element Method	AME403	Second Year/MSc Mathematics
492	Data Structure using C++	AME404	Second Year/MSc Mathematics
493	Graph Theory	AME405	Second Year/MSc Mathematics
494	Theory of Relativity & Cosmology	AME406	Second Year/MSc Mathematics
495	Artificial Intelligence	AME407	Second Year/MSc Mathematics
496	Design Analysis & Algorithms	AME408	Second Year/MSc Mathematics
497	Matrix Computation Lab	AMC403	Second Year/MSc Mathematics
498	Programming in C	CAC101	First Year/MCA
499	Computer Organization and Architecture	CAC102	First Year/MCA
500	Discrete Mathematics	CAS101	First Year/MCA
501	Management Information System	CAH101	First Year/MCA
502	Business Communications	CAH102	First Year/MCA
503	Extra- Curricular activities & Social Work	CAC103	First Year/MCA
504	Programming in C Lab	CAC104	First Year/MCA
505	Business Communications Lab	CAH103	First Year/MCA
506	Data Structures	CAC201	First Year/MCA
507	OOPs using C++	CAC202	First Year/MCA
508	Microprocessor	CAC203	First Year/MCA
509	Operating Systems	CAC204	First Year/MCA
510	Computational Mathematics	CAC205	First Year/MCA
511	Engineering Economics	CAH201	First Year/MCA
512	Data Structures Lab	CAC206	First Year/MCA
513	OOPs using C++ Lab	CAC207	First Year/MCA
514	Microprocessor Lab	CAC208	First Year/MCA
515	Operating Systems Lab	CAC209	First Year/MCA
516	Design & Analysis of Algorithms	CAC301	Second Year/MCA
517	OOPs using Java (Core)	CAC302	Second Year/MCA
518	Formal Language & Automata Theory	CAC303	Second Year/MCA
519	Database Management System	CAC304	Second Year/MCA
520	Computer Networks & Security	CAC305	Second Year/MCA
521	Applied Probability & Statistics	CAS301	Second Year/MCA



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 Indira Gandhi Institute of Technology
 Sarang Dhankajal-759146

522	Internship Evaluation	CAJ301	Second Year/MCA
523	Design & Analysis of Algorithms Lab	CAC306	Second Year/MCA
524	OOPs using Java (Core) Lab	CAC307	Second Year/MCA
525	Database Management System Lab	CAC308	Second Year/MCA
526	Computer Networks & Security Lab	CAC309	Second Year/MCA
527	Python Programming	CAC401	Second Year/MCA
528	Compiler Design	CAC402	Second Year/MCA
529	Software Engineering	CAC403	Second Year/MCA
530	Quantitative Techniques	CAS401	Second Year/MCA
531	Embedded Systems	CAE401	Second Year/MCA
532	Parallel and Distributed	CAE402	Second Year/MCA
533	Real Time Systems	CAE403	Second Year/MCA
534	Machine Learning	CAE404	Second Year/MCA
535	Data Mining & Data Warehousing	CAE405	Second Year/MCA
536	Distributed Database	CAE406	Second Year/MCA
537	Soft Computing	CAE407	Second Year/MCA
538	Python Programming Lab	CAC404	Second Year/MCA
539	Software Engineering Lab	CAC405	Second Year/MCA
541	Computer Graphics	CAC501	Third Year/MCA
542	Artificial Intelligence	CAC502	Third Year/MCA
543	PHP & SQL Programming	CAE501	Third Year/MCA
544	Android Programming	CAE502	Third Year/MCA
545	Advance Java Programming	CAE503	Third Year/MCA
546	Cloud Computing	CAO501	Third Year/MCA
547	IOT & Big Data	CAO502	Third Year/MCA
548	Wireless Sensor Networks	CAO503	Third Year/MCA
549	Computer Graphics Lab	CAC503	Third Year/MCA
550	Personality & Soft Skill Development Lab	CAH501	Third Year/MCA
551	PHP & SQL Programming Lab	CAE504	Third Year/MCA
552	Android Programming Lab	CAE505	Third Year/MCA
553	Advance Java Programming Lab	CAE506	Third Year/MCA
555	Entrepreneurship Development	CAH601	Third Year/MCA
556	Accounting Information System	CAH602	Third Year/MCA
557	Problem Solving & Programming Using C	20CAC101	First Year/MCA
558	Computer Organization and Architecture	20CAC102	First Year/MCA
559	Discrete Mathematics	20CAS102	First Year/MCA
560	Communicative English	20CAH101	First Year/MCA
561	Engineering Economics & Accounting	20CAH102	First Year/MCA
562	Problem Solving using C Lab	20CAL101	First Year/MCA
563	Communicative English Lab	20CAL102	First Year/MCA
564	Computer Organization Lab	20CAL103	First Year/MCA
565	OOPs Using C++	20CAC203	First Year/MCA
566	Operating System	20CAC204	First Year/MCA
567	Database Management System	20CAC205	First Year/MCA
568	Design of Algorithms with Data Structures	20CAC206	First Year/MCA
569	Formal Languages and Automata Theory	20CAC207	First Year/MCA
570	OOPs using C++ Lab	20CAL204	First Year/MCA
571	Database Management System Lab	20CAL205	First Year/MCA
572	Algorithms with Data Structures Lab	20CAL206	First Year/MCA
573	Programming with Java	20CAC308	First Year/MCA
574	Data Communications and Networks	20CAC309	First Year/MCA
575	Compiler Design	20CAC310	First Year/MCA


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 Indira Gandhi Institute of Technology
 Sarang, Dhenkanal-759146

576	Wireless Ad Hoc & Sensor Networks	20CAE301	First Year/MCA
577	Cloud Computing	20CAE302	First Year/MCA
578	Internet of Things	20CAE303	First Year/MCA
579	Soft Computing	20CAE304	First Year/MCA
580	Mobile Computing	20CAE305	First Year/MCA
581	Simulation Modeling	20CAE306	First Year/MCA
582	Optimization Techniques	20CAE307	First Year/MCA
583	Data warehousing and Data Mining	20CAE308	First Year/MCA
584	Machine Learning	20CAE309	First Year/MCA
585	Big Data Analytics	20CAE310	First Year/MCA
586	Data Science with Applications	20CAE311	First Year/MCA
587	Natural Language Processing	20CAE312	First Year/MCA
588	Information Retrieval System	20CAE313	First Year/MCA
589	High Performance Computing	20CAE314	First Year/MCA
590	Cyber Security	20CAE315	First Year/MCA
591	Java Programming Lab	20CAL307	First Year/MCA
592	Computer Networks Lab	20CAL308	First Year/MCA
593	Seminar & Technical Writing	20CAJ301	All
595	Artificial Intelligence	20CAC411	First Year/MCA
596	Object Oriented Software Engineering	20CAC412	First Year/MCA
597	Python Programming	20CAC413	First Year/MCA
599	Dissertation Phase-I	TRJ301	Second Year/Transportation
600	Dissertation Phase-II	TRJ401	Second Year/Transportation


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