



Annamacharya Institute of Technology and Sciences, Tirupati
(AUTONOMOUS)
Department of Electronics and Communication Engineering



List of Courses (2017-18 TO 2021-22)

S. No	Course code	Name of the Course	Remarks	% of Syllabus content modified
1.	19ABS9901	Algebra and Calculus	New course	100
2.	19ABS9902	Applied Physics	New course	100
3.	19AES0501	Problem Solving and Programming	New course	100
4.	19AHS9901	Communicative English - I	New course	100
5.	19ALC0401	Electronics and Communication Engineering Workshop	New course	100
6.	19ABS9907	Applied Physics Laboratory	New course	100
7.	19AES0503	Problem Solving and Programming Laboratory	New course	100
8.	19AHS9902	Communicative English - I Laboratory	New course	100
9.	19AES0201	Network Theory	New course	100
10.	19ABS9906	Differential Equations and Vector Calculus	New course	100
11.	19ABS9904	Chemistry	New course	100
12.	19AES0502	Data Structures	New course	100
13.	19ALC0301	Engineering Workshop Practice	New course	100
14.	19AES0301	Engineering Graphics Laboratory	New course	100
15.	19AES0203	Network Theory Laboratory	New course	100
16.	19ABS9909	Chemistry Laboratory	New course	100
17.	19AES0504	Data Structures Laboratory	New course	100
18.	19ABS9912	Transform Techniques and Complex Variables	New course	100
19.	19AHS9903	Communicative English II	New course	100
20.	19AES0505	Internet of Things (IoT)	New course	100
21.	19AMC9903	Environmental Studies	New course	100
22.	19AHS9904	Communicative English II Lab	New course	100
23.	19AES0506	Internet of Things (IoT) Lab	New course	100
24.	19APC0405	Signals and Systems Laboratory	New course	100
25.	19AES0509	Basics of Python Programming	New course	100
26.	19AES0302	Design Thinking and Product Innovation	New course	100
27.	19ABS9920	Probability and Random Variables	New Course	100
28.	19AMC9901	Biology for Engineers	New course	100
29.	19APR0401	Socially Relevant Projects(15 hours / semester)	New course	100
30.	19AES0510	Basics of Python Programming Lab	New course	100
31.	19AES0303	Design Thinking and Product Innovation Lab	New course	100
32.	19APC0406	Analog Electronic Circuits	New Course	100
33.	19APC0208	Control Systems		20
34.	19AMC9902	Constitution of India	New course	100
35.	19APR0402	Socially Relevant Projects (15 Hours /Sem)	New course	100
36.	19APC0410	Digital Electronics and Logic Design		20
37.	19APC0412	Analog and Digital Communications		50
38.	19APE0401	Information Theory and Coding	New course	100
39.	19APE0403	Computer System Architecture	New course	100
40.	19AOE0501	Database Management Systems	New course	100

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41.	19AOE0502	Operating Systems	New course	100
42.	19AOE0202	Programmable Logic Controllers	New course	100
43.	19APC0414	Digital Electronics and Logic Design Laboratory	New course	100
44.	19APC0415	Analog and Digital Communications Laboratory	New course	100
45.	19APC0419	Microwave Engineering and Optical Communications	New course	100
46.	19APE0404	Real Time Operating Systems	New course	100
47.	19APE0406	MEMS		20
48.	19AHE9902	Principles of Effective Public Speaking	New course	100
49.	19AOE0518	Scripting Languages	New course	100
50.	19AHE9907	Advanced Optics	New course	100
51.	19AHE9905	Materials Chemistry	New course	100
52.	19APC0422	Microwave Engineering and Optical Communications Laboratory	New course	100
53.	19APR0404	Industrial Training/ Internship/ Research Projects in National Laboratories/Academic Institutions	New course	100
54.	19APR0403	Socially Relevant Project	New course	100
55.	19APC0510	Computer Networks	New course	100
56.	19AOE0301	Management Science	New course	100
57.	19APE0409	RF System Design	New course	100
58.	19APE0412	Digital IC Design	New course	100
59.	19APE0410	Satellite Communication		20
60.	19AOE0304	Robotics	New course	100
61.	19AHE9901	Technical Writing	New course	100
62.	19AHE9906	Effective Technical Communication	New course	100
63.	19APC0427	Embedded Systems and UAV Laboratory	New course	100
64.	19APC0427	Socially Relevant Project	New course	100
65.	19AOE0101	Structural Health Monitoring	New course	100
66.	19AOE0518	An Introduction to Artificial Intelligence	New course	100
67.	19APE0208	Electricity and Safety Measures	New course	100
68.	19APE0413	Electronic Systems for Cancer diagnosis	New course	100
69.	19APE0414	Wireless Communications	New course	100
70.	19APE0415	Speech Processing	New course	100
71.	19APR0407	Technical Paper Presentation/Seminars		
		Total no. of subjects in R15 of JNTUA syllabus	75	
		No. of subjects with $\geq 20\%$ change in AK19 syllabus	71	
		% of subjects with change in contents	94.6%	

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List of New Courses UG-AK20 Regulations

S. No	Course code	Name of the Course	Remarks	% of Syllabus content modified
1.	20AHS9905	Universal Human Values	New course	100
2.	20AHE9902	Principles of Effective Public Speaking	New course	100
3.	20AMC9904	Professional Ethics And Human Values	New course	100
4.	20 AOE0516	R Programming	New course	100
5.	20ASA0501	Basics Cloud Computing	New course	100
6.	20APE0409	Television Engineering	New course	100
7.	20APE0417	Sensors and IoT	New course	100
8.	20 AOE0402	Biomedical Instrumentation	New course	100
		Total no. of subjects in AK19 to AK20 Syllabus	75	
		No.of subjects with $\geq 20\%$ change in AK19 syllabus	8	
		% of subjects with change in contents	10.66%	

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List of new courses PG-AK19

S. No	Course code	Name of the Course	Remarks	% of Syllabus content modified
1	22DPE3803	Audio Video Coding and Compression	New course	100
2	22DPE3805	Data Networks	New course	100
3	22MBA0110	Research Methodology and IPR	New course	100
4	22DMC9901	English for Research Paper Writing	New course	100
5	22DMC2001	Disaster Management	New course	100
6	22DMC9902	Sanskrit for Technical Knowledge	New course	100
7	22DMC9903	Value Education	New course	100
8	22DPC3805	Pattern Recognition	New course	100
9	22DPC3806	Detection and Estimation of Signals	New course	100
10	2DPE3808	Microcontrollers and Programmable Digital Signal Processors	New Course	100
11	22DPE3809	Sensors and Actuators	New course	100
12	22DMC9904	Constitution of India	New course	100
13	22DMC5801	Pedagogy Studies	New course	100
14	22DMC9905	Stress Management by Yoga	New course	100
15	22DM9906	Personality Development through Life Enlightenment Skills	New Course	100
16	22DPC3807	Pattern Recognition Lab	New course	100
17	22DPC3808	Detection and Estimation of Signals Lab	New course	100
18	22DPR3801	Technical Writing	New course	100
19	22DPE3813	Remote Sensing	New course	100
20	22DPE3814	High Performance Networks	New course	100
21	22DPE3815	MIMO Systems	New course	100
22	22DOE2001	Waste to Energy	New course	100
23	22DOE2002	Project Management	New course	100
24	22DOE9001	Industrial Safety	New course	100
25	22DOE9001	Operations Research	New course	100
26	22DOE5801	Business Analytics	New course	100
27	22DOE9004	Composite Materials	New course	100
		Total no. of subjects in R17 of JNTUA syllabus	30	
		No. of subjects with $\geq 20\%$ change in AK19 syllabus	27	
		% of subjects with change in contents	90%	

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