



**KAKATIYA INSTITUTE OF TECHNOLOGY AND SCIENCE, WARANGAL**  
**HONOURS IN ELECTRONICS & COMMUNICATION ENGINEERING**  
**(HEC)-HONOURS CURRICULUM**

S.No	Course Type	CourseCode	Course Name	Credits
-	Honours Elective Courses	Electivecourses ( any 4 to 5courses)		
1		U24HEC1001	Phase-Locked Loops	15-16
2		U24HEC1002	Digital VLSI Testing	
3		U24HEC1003	Mathematic aspects of biomedical electronic system design	
4		U24HEC1004	Sensor Technologies: Physics, Fabrication, and Circuits	
5		U24HEC1005	Artificial Intelligence	
6		U24HEC1006	Integrated photonic devices and circuits	
7		U24HEC1007	Industry 4.0 and Industrial Internet of things	
8		U24HEC1008	Software Defined Radio	
9		U24HEC1009	Machine Learning and Deep Learning - Fundamentals and Applications	
10		U24HEC1010	Nano Technology	
11		U24HEC1011	Coding Theory	
12		U24HEC1012	Modern Digital Communication Techniques	
13		U24HEC1013	Computer Vision and Image Processing- Fundamentals and Applications	
14		U24HEC1014	Microwave Theory and Techniques	
15	U24HEC1015	Principles of Signal Estimation for MIMO/ OFDM Wireless Communication		
<p>I. In exigency situations such as the student already completed the listed compulsory courses(s) on his/her own interest during previous semesters through valid MOOCsetc, the HoD in consultation with Dean-AA shall offer an alternative course(s) for the specific scenario, after verification of relevant documents.</p> <p>II. By the end of April of every academic year,the department in consultation with Dean-AA, shall</p> <p>A. Notify the list of equivalent courses in SWAYAM-NPTELMOOCs/ other standard MOOCs against the list of courses notified under Honours curriculum</p> <p>B. Propose a new course(s) in the place of any listed course(s) in the Honour curriculum, in case no equivalent course is found in MOOCs</p>				
-	Honours Laboratory Courses	Laboratory Courses (any2courses)		
16		U24HEC1016	VLSI DesignLaboratory	2
17		U24HEC1017	Advanced Communication Laboratory	
18		U24HEC1018	Signal Processing and Applications Laboratory	
19	U24HEC1019	Antenna Design Laboratory		
20	Honours Mini-project (optional)	U24HEC1020	Mini-project (optional)	2
Total Credits 16+2				18