

## CURRICULUM

### First Semester

Course Code	Type	Course	L T P	Cr
19MA602	FC	Mathematical Methods for Engineering	3 0 3	4
19CM601	FC	Signal Processing for Communications	3 0 0	3
19CM602	FC	Information Theory and Coding	3 0 0	3
19CM611	SC	Wireless Communication	3 0 3	4
19CM612	SC	Radio Frequency Transceiver System Design	3 0 3	4
19CM613	SC	Communication Systems lab	0 0 3	2
19HU601	HU	Amrita Values Program*		P/F
19HU602	HU	Career Competency I*		P/F
		<b>Credits</b>		<b>20</b>

\* Non-credit course

### Second Semester

Course Code	Type	Course	L T P	Cr
19CM614	SC	Wireless Networks and Protocols	3 0 3	4
19CM615	SC	Hardware Design with FPGA	3 0 3	4
19CM616	SC	Machine Learning for Communication Systems	3 0 0	3
19RM600	SC	Research Methodology	2 0 0	2
	E	Elective I	3 0 0	3
	E	Elective II	3 0 0	3
	E	Elective III	3 0 0	3
19CM617	SC	Modelling and Simulation of Communication Systems Lab	0 0 3	2
19HU603	HU	Career Competency II	0 0 3	1
		<b>Credits</b>		<b>25</b>

### Third Semester

Course Code	Type	Course	L T P	Cr
19CM798	P	Dissertation		8
		<b>Credits</b>		<b>8</b>

### Fourth Semester

Course Code	Type	Course	L T P	Cr
19CM799	P	Dissertation		12
		<b>Credits</b>		<b>12</b>
		<b>TOTAL CREDITS (20+25+8+12)</b>		<b>65</b>

## Electives

<b>Wireless Communication</b>		<b>L T P</b>	<b>Cr</b>
19CM701	Millimeter Wave Communication Systems	3 0 0	3
19CM702	Multicarrier Communications	3 0 0	3
19CM703	Software Defined Radio	3 0 0	3
19CM704	Vehicular Communications and Networks	3 0 0	3
19CM705	Security for Wireless Communications	3 0 0	3
19CM706	Internet of Things	3 0 0	3
19CM707	Cooperative and Relay Communication	3 0 0	3
19CM708	Massive MIMO	3 0 0	3
19CM709	Estimation and Detection Theory	3 0 0	3
19CM710	Error Control Coding	3 0 0	3
<b>RF Front End</b>			
19CM711	Automotive radar	3 0 0	3
19CM712	Antenna and Array Systems Design	3 0 0	3
<b>Communication Networks</b>			
19CM721	Multisensor data fusion	3 0 0	3
19CM722	Stochastic Modeling and Queuing Theory	3 0 0	3
19CM723	Network Coding	3 0 0	3
19CM724	Wireless Sensor Networks	3 0 0	3
<b>Computational Techniques</b>			
19CM731	Convex Optimization	3 0 0	3
19CM732	Big Data Analytics	3 0 0	3
19CM733	Game Theory	3 0 0	3
<b>Signal and Image Processing</b>			
19CM741	Speech and Audio Processing	3 0 0	3
19CM742	Image and Video Processing	3 0 0	3