



<b>Course:</b> M.Sc.	<b>Name of Faculty:</b> Swathy K C
<b>Topic:</b> ELE 2205 Microwave Integrated Circuits	<b>Semester:</b> II
<b>Lecture Hall:</b>	<b>Timings:</b> as per CBCS

<b>Week and date</b>	<b>Lecture topics</b>	<b>Assignments</b>	<b>Remarks</b>
Week 1 (3 <sup>rd</sup> January 2017)	<b>Module I</b> - Strip line, Microstrip line -coplanar line -quasi – static model of microstrip line -effective permittivity		
Week 2 (9 <sup>th</sup> January 2017)	-characteristic impedance - substrates for MIC -slot line and coplanar waveguide	<b>Assignment I</b> dielectric and conductor Losses	
Week 3 (16 <sup>th</sup> January 2017)	<b>Module II</b> - Discontinuities in Micro strip lines and coplanar lines, step, bent,		
Week 4 (23 <sup>rd</sup> January 2017)	- T- junction, Hybrid line coupler parallel coupled line and directional couplers, Even and odd mode analysis		
Week 5 (30 <sup>th</sup> January 2017)	-Branch line couplers, impedance transformers	<b>Assignment I Submission</b>	
Week 6 (6 <sup>th</sup> February 2017)	<b>First Internals</b>		
Week 7 (13 <sup>th</sup> February 2017)	<b>Module III</b> - Design and fabrication of lumped elements, circuits using lumped elements. Filters		
Week 8 (20 <sup>th</sup> February 2017)	<b>Module IV</b> - Microstrip on Ferromagnetic substrates		
Week 9 (27 <sup>th</sup> February 2017)	-Microstrip circulators. Isolators and phase shifters		
Week 10 (6 <sup>th</sup> March 2017)	- Design of microstrip circuits (high power and low power circuits).		
Week 11 (13 <sup>th</sup> March 2017)	<b>Module V</b> - Thick film and Thin film technology.  Hybrid MIC's.	<b>Assignment II</b>  Lumped constant Microstrip circuits	

<p>Week 12 (20<sup>th</sup> March 2017)</p>	<p>- Monolithic MIC technology, fabrication process, testing methods.</p>		
<p>Week 13 (27<sup>th</sup> March 2017)</p>	<p><b>Second Internals</b></p>		
<p>Week 14 (3<sup>rd</sup> April 2017)</p>	<p>- encapsulation and mounting of devices</p>	<p><b>Assignment II submission</b></p>	