

<b>COURSE CODE</b>	<b>COURSE TITLE</b>	<b>L</b>	<b>T</b>	<b>P</b>	<b>C</b>
<b>1152BM116</b>	<b>NANO ELECTRONICS</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>3</b>

**PREAMBLE**

The Purpose of the course is to provide students with the basic knowledge in nanoelectronics. This course emphasize on nano materials, types, synthesis, interconnects and fabrication.

**PREREQUISITE**

None

**LINKS TO OTHER COURSES**

Quantum Electronics

**COURSE OUTCOMES**

Upon successful completion of the course the students will be able to

<b>S.No</b>	<b>Course outcome</b>	<b>Skill Level</b>
1	Understand the limitations of silicon electronics and progress of nanoelectronics.	K2
2	Equip themselves about the significance of tunneling effect in nanoelectronic devices.	K2
3	Understand the concepts of coulomb blockade and electron transport.	K2
4	Improve their ability in knowing the electronic property of materials in mesoscopic level.	K2
5	Achieve adequate knowledge in simulation methods	K2

**Correlation of COs with POs :**

<b>COs</b>	<b>PO1</b>	<b>PO2</b>	<b>PO3</b>	<b>PO4</b>	<b>PO5</b>	<b>PO6</b>	<b>PO7</b>	<b>PO8</b>	<b>PO9</b>	<b>PO10</b>	<b>PO11</b>	<b>PO12</b>
<b>CO1</b>	<b>M</b>	<b>L</b>	<b>H</b>									
<b>CO2</b>	<b>M</b>											
<b>CO3</b>	<b>M</b>		<b>H</b>									
<b>CO4</b>	<b>M</b>											
<b>CO5</b>	<b>L</b>		<b>M</b>									

**H- High; M-Medium; L-Low**

