

# BITS Pilani Dubai Campus, Dubai, UAE

Semester-wise pattern for Students Admitted to Higher Degree Program in the First Semester

## M.E. Microelectronics

Year	I Semester			U	II Semester			U	Summer Term			U				
I	BITS	G659	Technical Communication	4	BITS	G620	Professional Practice I	3	MEL	G632	Analog IC Design	5				
	MEL	G611	IC Fabrication Technology	5	MEL	G621	VLSI Design	5					MEL	G642	VLSI Architectures	4
	MEL	G631	Physics and Modeling of Microelectronic Devices	5	MEL	G641	CAD for IC Design	5								
				14					13				9			
II	BITS	G621	Professional Practice II 2 Electives	3 *	BITS	G629T	Dissertation 1 Elective	10 *	BITS	G629T	Dissertation	7				
					9 (min.)					13 (min.)				7		

\* Minimum 3 Units each Elective

### Pool of Electives (Any three from the following)

Elective offerings are subject to availability of (i) faculty who can offer the elective and (ii) the minimum viable no. of students opting for the elective

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. BITS G554 Data Compression 3 2 5</li> <li>2. CS G553 Reconfigurable Computing 5</li> <li>3. CS G555 System Specifications and Modeling 4</li> <li>4. CS G562 Advanced Architecture and Performance Evaluation 3 2 5</li> <li>5. CS G612 Fault Tolerant System Design 5</li> <li>6. EA C415 Introduction to MEMS 4</li> <li>7. EEE C415 Digital Signal Processing 3 0 3</li> <li>8. EEE G510 RF Microelectronics 5</li> <li>9. EEE G512 Embedded System Design 4</li> </ol> | <ol style="list-style-type: none"> <li>10. EEE G592 Mobile and Personal Communication 5</li> <li>11. EEE G626 Hardware Software Codesign 4</li> <li>12. MEL G512 Optoelectronic Devices, Circuits and Systems 5</li> <li>13. MEL G531 Testable Design &amp; Fault Tolerant Computing 5</li> <li>14. MEL G612 Integrated Electronic System Design 4</li> <li>15. MEL G622 Introduction to Artificial Neural Networks 4</li> <li>16. MEL G623 Advanced VLSI Design 5</li> <li>17. MEL G624 Advanced VLSI Architectures 5</li> <li>18. MEL G625 Advanced Analog and Mixed Signal Design 5</li> <li>19. MEL G626 VLSI Test and Testability 5</li> </ol> |
|--|---|

- Note:**
1. Semester wise pattern given above is as suggested by the appropriate Senate-appointed committee, subject to change if the situation warrants.
  2. Pool of Electives listed above are currently approved by Senate, subject to change if the situation warrants
  3. Upon comparing the student's input degree curriculum with BITS degree curriculum, if a student is found to be inadequately prepared, one or more Deficiency courses may be prescribed and added to the courses of the Semester wise pattern (Chart) given above.