# Area Courses

## VLSI/CAD

### Fundamental Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>EE 448L</td>
<td>Communication Electronics</td>
<td>4</td>
</tr>
<tr>
<td>EE 477L</td>
<td>MOS VLSI Circuit Design</td>
<td>4</td>
</tr>
<tr>
<td>EE 457</td>
<td>Computer Systems Organization</td>
<td>4</td>
</tr>
<tr>
<td>CSCI 455X</td>
<td>Introduction to Programming Systems Design</td>
<td>4</td>
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</tbody>
</table>

### VLSI/CAD Courses

#### EE 552 Asynchronous VLSI Design
- 4 units
- EE 457

#### EE 560L Digital System Design
- 4 units
- EE 457

#### EE 580 System Verification
- 4 units
- EE 457, EE 477L

#### EE 658 Diagnosis and Design of Reliable Digital Systems
- 3 units
- EE 457, EE 477L

#### EE 681 Computer-Aided Design of Digital Systems II
- 3 units
- EE 577a

### Circuits and Devices

#### EE 504L Solid-State Processing and Integrated Circuits Laboratory
- 4 units
- EE 507 or EE 508

#### EE 505 Analog, Mixed-Signal, and RF Integrated-Circuit Tape-Out
- 4 units
- EE 536a

#### EE 507 Micro- and Nano-Fabrication Technology
- 4 units

#### EE 537 Modern Solid-State Devices
- 4 units

#### EE 582 CMOS: Nano Neuromorphic Circuits
- 4 units
- EE 477

### Computer Systems

#### EE 557 Computer Systems Architecture
- 4 units
- EE 457

#### EE 577ab VLSI System Design
- 4 units
- EE 477L, EE 577a

#### EE 595 Software Design and Optimization
- 4 units

#### EE 659 Advanced Topics in Interconnection Network Design and Analysis
- 4 units
- EE 450, 451, 452, or 455

#### EE 677 Accelerated Computing using Field Programmable Gate Arrays
- 2 units
- EE 457

### Legend

- **Grouping**
  - EE 000 Course Title
  - Course Units
  - Recommended Prep.
  - Prequisite Courses
  - Corequisite Courses

This chart shows course relationships. Please check the University Catalogue for specific course details including any recommended preparatory courses and Degree Requirements.