The Computer Engineering Division’s Screening Exam is as follows:

1. **Fundamental courses:** Students will have one 30-minute oral exam in front of one faculty for each of four fundamental courses that they will select from the following list:

   EE 450 Introduction to Computer Networks
   EE 451 Parallel and Distributed Computation
   EE 457 Computer Systems Organization
   EE 467 Introduction to Communication Systems
   EE 477 MOS VLSI Circuit Design
   EE 503 Probability for Electrical and Computer Engineers
   CSCI 402 Operating Systems
   CSCI 570 Analysis of Algorithms

2. **Depth courses:** Students will have one 30-minute oral exam in front of one faculty for each of two depth courses that they will select from the following list: (The questions in these exams may go beyond the standard curriculum of the selected courses to test research capability in the selected areas.)

   **In the area of Computer Architecture:**
   EE 532 Wireless Internet and Pervasive Computing
   EE 542 Internet and Cloud Computing
   EE 554 Real Time Computer Systems
   EE 557 Computer Systems Architecture
   EE 653 Advanced Topics in Microarchitectures
   EE 657 Parallel Processing
   EE 659 Interconnection Networks
   EE 677 VLSI Architectures and Algorithms
   CSCI 503 Parallel Programming

   **In the area of Digital Systems Design (VLSI/CAD)**
   EE 552 Logic Design and Switching Theory
   EE 536a Mixed-signal integrated system design
   EE 577a VLSI System Design
   EE 658 Diagnosis and Design of Reliable Digital Systems
   EE 680 Computer Aided Design of Digital Systems I
   EE 681 Computer Aided Design of Digital Systems II

   **In the area of Computer Networks**
   EE 512 Stochastic Processes
   EE 549 Queuing Theory for Performance Modeling
   EE 550 Design and Analysis of Computer Communications
   EE 555 Broadband Network Architectures
   EE 597 Wireless Networks
   EE 649 Stochastic Network Optimization
   CSCI 551 Computer Communications