## BEng (CE) Programme
Applicable to students matriculating from 2017 onwards

### YEAR 1
- Introduction to Computational Thinking
- Computer Organisation and Architecture
- Data Structures
- Digital Logic
- Algorithms
- Object Oriented Design & Programming
- Digital Systems Design
- Circuits and Signal Analysis
- Operating Systems
- Ethics & Moral Reasoning
- Liberal Arts

### YEAR 2
- Software Engineering
- Microprocessor-based Systems Design
- Advanced Computer Architecture
- Sensors, Interfacing and Control
- Business & Management
- Unrestricted Elective
- Algorithms
- Object Oriented Design & Programming
- Human Computer Interaction
- Introduction to Databases
- Operating Systems
- Ethics & Moral Reasoning
- Liberal Arts
- Software Engineering
- Computer Graphics and Visualisation
- Advanced Computer Architecture
- Software Systems Analysis and Design
- Business & Management
- Unrestricted Elective

### YEAR 3
- Microcontroller Programming
- Computer Networks
- Multidisciplinary Design Project
- Technical Elective 1
- Engineering Communication II
- Final Year Project
- Digital Signal Processing
- Digital Communications
- Unrestricted Electives
- Technical Elective 2
- Technical Elective 3
- Technical Elective 4
- Technical Elective 5
- Technical Elective 6

### YEAR 4
- Final Year Project
- Artificial Intelligence
- Compiler Techniques
- Unrestricted Electives
- Technical Elective 2
- Artificial Intelligence
- Data Science and Analytics
- High Performance Computing
- Cyber Security
- Networking and Mobility

## BEng (CS) Programme
Applicable to students matriculating from 2017 onwards

### Common Year
- Engineering Mathematics I
- Engineering Mathematics II
- Discrete Mathematics
- Physics for Computing
- Engineers and Society
- Introduction to Sustainability: Multidisciplinary Approaches and Solutions
- Engineering Communication I
- Science & Technology Elective
- Unrestricted Elective
- Absolute Basics for Career by MLCPS (Margaret Lien Centre for Professional Success)

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- Introduction to Computational Thinking
- Computer Organisation and Architecture
- Data Structures
- Digital Logic
- Algorithms
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- Digital Systems Design
- Circuits and Signal Analysis
- Operating Systems
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### YEAR 2
- Software Engineering
- Microprocessor-based Systems Design
- Advanced Computer Architecture
- Sensors, Interfacing and Control
- Business & Management
- Unrestricted Elective
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- Object Oriented Design & Programming
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- Software Engineering
- Computer Graphics and Visualisation
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- Software Systems Analysis and Design
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### YEAR 3
- Microcontroller Programming
- Computer Networks
- Multidisciplinary Design Project
- Technical Elective 1
- Engineering Communication II
- Final Year Project
- Digital Signal Processing
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- Unrestricted Electives
- Technical Elective 2
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- Technical Elective 5
- Technical Elective 6

### YEAR 4
- Final Year Project
- Artificial Intelligence
- Compiler Techniques
- Unrestricted Electives
- Technical Elective 2
- Artificial Intelligence
- Data Science and Analytics
- High Performance Computing
- Cyber Security
- Networking and Mobility

The curriculum is correct at the time of printing. For updates/changes in modules for programme, please refer to scse.ntu.edu.sg