

Core Curriculum to the Course:

Environmental Science
Law
Economy for Engineering
Accounting for Engineering
Production System Planning and Analysis
Electric Circuits
Logic Circuits
Methods for Electric Engineering
Applied Electronic
Applied Electronic Laboratory
Materials Resistance
Transport Phenomena
General Physics I
Experimental Physics I
General Physics II
Experimental Physics II
General Mechanics I
General Physics III
Experimental Physics III
General Physics IV
Experimental Physics IV
Special Topics in Humanity I
Instrumental English I
Calculus I
Analytic Geometry and Vectors
Calculus II
Calculus III
Linear Algebra
Algorithm and Computer Programming
Data Structures
Object Oriented Programming
Mathematical Foundations of Computer Science
Computer Organization and Assembly Language
Design and Analysis of Algorithm I
Database: Theory and Practice
Introduction to Probabilistic Models
Numerical Calculus
Chemistry

AA – Computer Systems

In addition to core curriculum, student should meet:

Introduction to Management
Final Graduation Project
Programming Paradigms
Software Engineering
Information System Project
Operating Systems
Design and Analysis of Algorithm II
Digital Circuit Laboratory
Design and Analysis of Algorithm III
Distributed Systems
Computational Systems Project
Computational Systems Project Laboratory
Human-Computer Interface Design
Teleprocessing and Networks
Computer Networks Programming
Project in Computer System
Compiler Construction
Project in Compilers

#### Elective Subjects

17 credits among:

Any subject offered by UNICAMP
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12 credits among:

Supervised Training
Supervised Training in Computer Science
Supervised Training in Computer Science II
Undergraduate Research I
Undergraduate Research II

4 credits among:

Special Topics in Graphic Processing
Introduction to Digital Image Processing

Computer Graphics
Image Processing and Analysis
Computational View
Image Retrieval by Content

4 credits among:

Machine Learning
Natural Language Processing
Introduction to Artificial Intelligence
Topics in Artificial Intelligence I

4 credits among:

Any subject with MC--- code
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AB – Industrial Systems and Processes

In addition to core curriculum, student should meet:

Final Paper
Artificial Intelligence and Industrial Applications
Introduction to Computer Networks
Introduction to Embedded Systems Project
Embedded Systems Laboratory
Computer Networks Laboratory
Signal Analysis
Linear System Analysis
Linear Systems Analysis Laboratory
Control and Servomechanism Principles
Control and Servomechanism Laboratory
Logical Circuits Laboratory
Basic Digital System Programming Laboratory
Basic Software Programming Laboratory
Introduction to System Software
Computer Organization
Software Engineering Laboratory
Software Engineering
Introduction to Computer Graphics and Image Processing

Digital Electronics I
Communication Principles I
Communication Lab I

Elective Subjects

23 credits among:

Any subject offered by UNICAMP
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12 credits among:

Scientific and Technological Training I
Scientific and Technological Training II
Training in Companies

AX – For Enrollment Before Option

In addition to core curriculum, student should meet:

Final Paper
Artificial Intelligence in Industrial Applications
Introduction to Computer Networks
Introduction to Embedded System Project
Embedded System Laboratory
Computer Networks Laboratory
Signal Analysis
Linear System Analysis
Linear Analysis Laboratory
Control and Servomechanism Principles
Control and Servomechanism Laboratory
Logical Circuit Laboratory
Basic Digital System Programming Laboratory
Basic Software Programming Laboratory
Introduction to System Software
Computer Organization
Software Engineering Laboratory
Software Engineering
Introduction to Graphic Computer and Image Processing

Digital Electronics I
Communication Principles I
Communication Lab I

Elective Subjects

12 credits among:

Scientific and Technological Training I
Scientific and Technological Training II
Training in Companies

23 credits among:

Any subject offered by UNICAMP
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