

Notes:

Undergraduate Degree Charts

- 1. HASS: Humanities, Arts and Social Sciences
- 2. Restricted Electives: Select two curricula from the three thematic areas, and each one requires 21 credit hours at least.
- 3. Course waivers for Restricted Electives: up to 2 courses can be waived by the courses in "Analytical and Mathematical Electives" and up to 7 credit hours can be waived by courses in Restricted Electives across departments.

Machinery Curriculum: 21 credit hours Computer Aided Analysis (U)3 Computer Aided Design 3 Heat Transfer 3 Special Topic on Agricultural Machinery Computer Aided Mechanical Drawing 1 Aquacultural Engineering 3 Introduction to Plant Factory 3 Machinery for Biological Production (U)3 Design of Machine Elements 3 Hydraulic and Pneumatic Engineering 3 Systems Engineering (U)3 Engineering in Biological Production Under Computer Aided Mechanical Design 2 Nondestructive evaluation (U)3 Fluid Mechanics 3 Structure 3 Robotics (U)3 Engineering Materials 3 Manufacturing Processes 2 Human Factors Engineering (U)3 Kinematics and Dynamics of Machinery 3 Unit Operations for Biological Production 3 Fundamental Principles of Spacial Smart Farming Technology Applied for Mechanisms (U)3 Livestock and Poultry Industry 2 Smart Greenhouse Engineering (U)3 Control Curriculum: 21 credit hours Principles and Applications of Programmable Logic Controller (U)3 Technologies and Applications of Computer Network 2 Basic mechatronic technologies with Lab or atory 2 Measurement and Instrumentation in Engineering (U)3 Graphical Programming Language 3 Programing and Design for Mobile Devices (U)3 Smart application on IOT 3 Signal Processing (U)3 Principles and Applications of Microprocessors 3 Intelligent Control (U)3 Digital Electronics 3 Image Processing (U)3 Build up A Multicopter and Its Operation 2 Automatic Controls (U)3 Mechatronic Engineering 2 Deep Learning and Its Application in Bio-Industry (U)3 Mechatronic Engineering Laboratory 1 Machine Learning and Its Application for Bio-industry (U)3 Principle and Application of Sensor 3 ➤ Biomedical Curriculum: 21 credit hours Introduction to Life Science 2 Biomaterials (U)3 Introduction to Signal and Neuroscience (U)3 Biochemistry 3

Biochemistry 3
Introduction to Elfe Science 2
Biochemistry 3
Introduction to Biotechnology 2
Human Anatomy 3
Principles of Biomedical Engineering 3
Experimental Biology 3
Experimental Animal Models 3

Findamentals (U)3

Neurophysiology (U)3

Fundamentals of Biophotonics (U)3

Bioinformatics (U)3

Surface Properties of Biomaterials (U)3

Applied Biophysics (U)3

Applied Electrochemistry (U)3