

46 credits

## Freshman Year

Cultures or General Courses (8)	Introduction of Engineering Technology (2) Elective courses (6)
Fundamental Courses (30)	Calculus(8) Physics & Lab (8) Chemistry& Lab (8) Biology(3) Engineering Statics(3)
Language (8)	English(4) Chinese(4)

35 credits

## Sophomore Year

	Advanced Structure & Smart Control	Sustainable Chemical & Materials Science Smart Technology
Engineering Profession Courses (23)	Engineering Dynamics (3) Fluid Mechanics (3) Material Mechanics (3) Structure Analysis (3) Automation Control (3) Fundamental Electronics (3) Engineering Graphics / /(BIM or AutoCAD)(3) Lab. (3D Printing or PBL-Learning) (2)	Physical Chemistry + Lab (7) Organic Chemistry + Lab (7) Unit Operation I & II (6) Polymer Chemistry (3)
Engineering Cores (12)	Engineering Math. I (3) Engineering Materials (3) Material Science (3) Computer Programming (3)	

26+ credits

## Junior Year

	Advanced Structure & Smart Control	Sustainable Chemical & Materials Science Smart Technology
Engineering Profession Courses (13)	<div> <b>Mechanical Engineering</b>            Manufacturing (3)            Thermodynamics (3)            Mechanical Design (3)            Mechanical design and practice(4)         </div> <div> <b>Civil &amp; Construction Engineering</b>            Soil Mechanics and Lab. (4)            Reinforced Concrete Design (3)            Foundation Engineering (3)            Engineering Management (3)         </div>	Polymer Chemistry (3) Instrumental Analysis (3) Thermodynamics(3) Kinetics(3) Lab in Materials and Fabrication (1)
Elective Courses (12)	Advanced Structure & Robot and Control & Smart Technology Advanced Chemical & Material Engineering & Nanofabrication Technology Biomolecular and Medical Engineering	

## Junior Year

18+ credits

Advanced Structure  
& Smart Control

Sustainable Chemical &  
Materials Science Smart  
Technology

Engineering  
Profession  
Courses  
(13)

Undergraduate Thesis (6)  
Engineering Project & Practical Training (6)  
Elective Courses (12)