ENGINEERING

With the advancement of technology, communication and healthcare, there is a great need for creative applications that can solve problems in our everyday lives and enhance our quality of life.

Engineering majors dominate the top ten highest-earning and most in-demand bachelor’s degrees, according to a survey by the National Association of Colleges and Employers (NACE). Its winter 2010 Salary Survey stated that engineering disciplines account for eight out of ten bachelor’s degrees.

INTI’s AUP prepares today’s engineers to be the innovators of tomorrow.

Popular majors / partial list of majors available

AEROSPACE / AERONAUTICAL ENGINEERING
This study focuses on the design, development, manufacturing, and testing of new technology in aircraft, spacecraft, military defense, and space systems. It will appeal to students interested in new technologies in aviation, defense systems, space exploration, problem-solving, and improving aircraft systems.

Employment opportunities
Airline & Aircraft Companies, Aircraft Architecture, Space Studies & Engineering, Reach & Testing Services

CHEMICAL ENGINEERING
This study involves the development of products such as antibiotics, fertilizers, polymers, fabrics, petroleum, synthetic fuels and more. Students keen on improving our way of life will find this major appealing. They will learn to develop chemical products and processes to reduce pollution and other world-benefiting solutions.

Employment opportunities
Chemical, Electronic, Petroleum Refining, Paper, Other Related Manufacturing Industries, Research & Testing Services or Government Agencies

CIVIL ENGINEERING
Study involves the design and supervision of roads, buildings, tunnels, dams, bridges, airports and construction. It will appeal to students interested in problem-solving related to construction and/or development, and protecting natural and man-made environments.

Employment opportunities
Firms that provide Engineering Consulting Services aimed at developing designs for new construction projects and manufacturing

INDUSTRIAL ENGINEERING
This study deals with improving and increasing organizational productivity through the management of people, business organization, and technology. Industrial Engineers help build a link between management goals and operational performance.

Employment opportunities
Management Agencies, Business & Consulting Services

MECHANICAL ENGINEERING
This study involves the research, creation, design, development, manufacturing and testing of mechanical devices and conversion of energy of machines. It will appeal to students with an interest in the invention, design and manufacturing of machines, mechanical devices or systems.

Employment opportunities
Production Operations in Manufacturing, Maintenance, Transportation Equipment, Electrical Equipment, Instruments or Fabricated Metal Precuts

PETROLEUM ENGINEERING
This study involves the design, development and process of finding minerals, oils and natural gases. It will appeal to those interested in the design and improvement of systems used in gas and oil production.

Employment opportunities
Oil & Gas Extraction, Refinery Plants, Oil Companies, Independent Oil Exploration, Production or Service Companies

COMPUTER ENGINEERING
This study involves the research, design, development and testing of computer systems. It also includes the supervision of the manufacturing and installation of computers and computer-related equipment. It will appeal to students interested in computer languages, structure, programs, modeling and also hardware and software development.

Employment opportunities
Computer Industries, Manufacturing, Communication or Engineering Consulting Firms

ELECTRICAL / ELECTRONIC ENGINEERING
This study involves the design, development, testing and supervision of electrical and electronic equipment manufacturing. It will appeal to students with an interest in developing and working with electrical and electronic system designs.

Employment opportunities
Engineering & Business Consulting Firms, Industries that manufacture Electrical & Electronic Devices, Office & Industrial Machinery or Communication & Transport Firms
BIOMEDICAL ENGINEERING
Biomedical Engineering combines medical and biological studies with engineering analysis and design, with an emphasis on analyzing biological organisms as engineering systems and applying engineering approaches to clinical, biomedical research and medical problems. By applying engineering methods such as robots for eye surgery, implantable defibrillators, artificial organs and tissues, prosthetics and the like, biomedical engineering aims to improve our quality of life.

Employment opportunities
Pharmaceuticals, Medical Devices, Artificial Organs, Prosthetics & Sensory Aids, Diagnostics, Medical Instrumentation, Medical Imaging, Medical Schools, Sports Medicine or Hospitals

BIOENGINEERING
Bioengineering refers to a discipline that works with living systems, including humans, plants and even microscopic organisms. Though this discipline may overlap slightly with Biomedical Engineering, Bioengineering applies principles of life science, mathematics and engineering to define and solve problems in the fields of biology, medicine and healthcare as well as areas of agriculture engineering and national defense.

Employment opportunities
Pharmaceuticals, Medical Devices, Artificial Organs, Prosthetics & Sensory Aids, Diagnostic, Medical Instrumentation, Medical Imaging, Medical Schools, Hospitals, Computer Modeling of Physiologic Systems, Biomaterials Design, or the design of agriculture-related devices & equipment

Popular universities for Engineering

US Universities
• California State University, Fresno
• Illinois Institute of Technology
• Iowa State University
• Michigan State University
• Michigan Technological University
• Missouri University of Science and Technology
• Ohio State University
• Oklahoma State University
• Purdue University
• University at Buffalo
• University of Kentucky
• University of Michigan, Ann Arbor
• University of Minnesota, Twin Cities
• University of Nebraska-Lincoln
• University of Wisconsin-Madison
• West Virginia University Institute of Technology
• Wichita State University

Canadian Universities
• University of Manitoba
• University of New Brunswick
• University of Saskatchewan
• University of Windsor

Sample curriculum for Year 1 & 2

• Calculus with Analytical Geometry 1
• Calculus with Analytical Geometry 2
• Calculus with Analytical Geometry 3
• Circuit Theory 1, Lab
• Circuit Theory 2, Lab
• Differential Equations
• English Composition 1
• Engineering Graphics
• Engineering Mechanics 1 – Statics
• Engineering Mechanics 2 – Dynamics
• Engineering Economics
• Essentials of Public Speaking
• Fine Arts Electives
• General Chemistry 1, Lab
• General Chemistry 2, Lab
• General Physics 1, Lab
• General Physics 2, Lab
• Humanities Electives
• Introduction to Computers & Information Processing
• Introduction to Engineering
• Introduction to Fluid Mechanics
• Introduction to Linear Algebra
• Social Sciences Electives
• Thermodynamics