Department of Chemical Engineering

051-200-7717 http://dache.donga.ac.kr

Introduction of the Department

Chemical engineering develops key technologies in various industries. In the field of nano (NT), chemical engineering produces human resources that develop transparent and electrically conductive materials that are used in displays such as LCDs and OLEDs and new materials such as semiconductors. In the field of energy and environment (ET), the department fosters human resources that will lead the field of solar cell, fuel cell development, and environmental measurement. In the field of life and biotechnology (BT), we will educate and train leaders who will lead the development of new materials for eco-friendly energy development (bio-ethanol, biodiesel), food and medicine.

Main Subject

Understanding of Intellectual Property Rights, Practical Chinese, Meeting of East-West culture, Presentation and Discussion, Presentation and Discussion of English, Creative Engineering Design, Organic Chemistry I
University Mathematics, Physics and Experiments, Chemistry and Experiments, General Biology, College Mathematics, Introduction to Science and Information Retrieval, Industrial Mathematics, Engineering Computers, Chemical Engineering, Physical Chemistry, Unit Manipulation, Thermodynamics, Reaction Engineering, Heat and Mass Transfer

Career after Graduation

1. Research and Education: chemical engineering experts such as large enterprise research institute, research institute of medium enterprise, researcher of university professor
2. Production and Quality Control: engineers specializing in productivity and quality control at the factories of medium-sized enterprises, large-scale enterprises related to chemical, shipbuilding, automobile,
3. Technology Marketing: professional marketing manager for large companies and medium enterprises

Q&A

Q. In Chemical Engineering, where are your graduates mostly employed after graduation?

Samsung Heavy Industries, Daewoo Shipbuilding & Marine Engineering, Samhwa Paint, and Samsung Electronics.

Q. What is your outlook after graduating from Chemical Engineering?

We have many alumni at the field of fermentation, acid alkali industry, environmental measures, alternative energy development fields, semiconductor and metal processing fields, new material development at chemical plants, new factories in petrochemical industry and so on. The number of job applications in various chemical plants is increasing day by day.

Specialty Program

ABEEK program: This accreditation is a system that evaluates the educational objectives, curriculum, educational environment and continuous improvement efforts of university engineering education and accredit only when excellence is validated. The name of the program is "Chemical Engineering Enrichment Program", and for students who have completed the program, they will be listed under the name "Chemical Engineering Degrees" (Korean) and "Bachelor of Engineering in Chemical Engineering" in the graduation certificate and transcript. And "Chemical Engineering Degrees" (Korean) or "Bachelor of Engineering" (English), respectively will be written for students who have not completed the program distinctively.

Department of Advanced Materials Engineering

051-200-7747 http://metal.donga.ac.kr

Introduction of the Department

Today, not only automotive, aerospace, and heavy chemical industries, but also all advanced science and technology fields such as semiconductors and computers and electric and electronic industries can not be developed without the development of excellent new materials. The new material engineering, which is the basis of all industries, is the study of the understanding of manufacturing, processing, analysis, the relationship between material structure and physical properties for new materials as the driving force of modern industrial development. Students who graduate from this department work as essential personnel in the materials industry.

Main Subject

Environment and Industry, Industrial Technology and Ethics, Science and Technology Philosophy, Practical English Conversation, Technical Writing, Engineering and Economics, Technology Management, CEO Special Lecture, Computational Processing, Computational Design, College Mathematics, Industrial Mathematics, Physics and Experiments, Creative Engineering Design, New Material Element Design
Material Mechanics, Casting Engineering, Material Process Experiment, Material Phase Equilibrium, Material Phase Transformation, Structure and Proportion of Non-alloy, Basic New Material Engineering, Material Science, Material Structure Experiment, Organization and Efficiency of Periodic Alloy, Material Thermodynamics, Steel Making and Lecture, Comprehensive Design of New Materials

Career after Graduation

① Iron and steel industry, ② Heavy industry, ③ Automobile industry, ④ Aerospace industry, ⑤ Electricity company field, ⑥ Public servant field, ⑦ Researcher

* Large enterprises & medium enterprises: Steel, automobile, shipbuilding, heat treatment, casting, forging, semiconductor, powder metallurgy, composite materials, aircraft, railway, medical equipment, petrochemical, industrial machinery, shoes, etc.
* Established venture business
* Employment of Public Enterprises: employment of public enterprises such as national railway corporation, water resources corporation and Korea Airports corporation

Q&A

Q. What is the Advanced Materials Engineering Program (Engineering Certification Scheme)?

The Advanced Materials Advanced Engineering Program (Engineering Certification System) is an educational program that helps students develop their skills in setting up a wide range of diagnostic and evaluation programs for the engineering education curriculum and pursuing engineering professions.

Q. What are the basic sciences that are important in the new materials engineering department?

The Department of Materials Science and Engineering is literally a discipline dealing with materials, so physics and chemistry are the most basic and important. As a result, freshmen will learn basic knowledge by taking Physics and Experiments I and II and Chemistry and Experiments I and II during their first year.

Specialty Program

Open Lab: Graduate labs are open to all students once a year, introducing the various laboratories and recruiting graduate students.
Yeongnam Sports Complex: Yeongnam Sports Complex is an event held every year for the academic and sports events of professors and students of the department of new material engineering from Yeungnam area universities.