

DTU Offers a New Automotive Engineering Technology Major in 2020

Several Vietnamese universities already offer courses in Automotive Engineering Technology but there still is, however, a serious shortage of trained personnel in vehicle manufacturing, production and repair. In 2020, as traffic volumes continue to increase in Vietnam, DTU plans to address that need. We spoke with Dr. Ha Dac Binh, Dean of the DTU Faculty for Electrical Engineering, to learn about the preparation for teaching this new major.

Reporter: *Vietnam now has its own car brand and many international manufacturers have already opened offices and showrooms in Vietnam and Automotive majors are now attracting far more interest at universities. Can you please tell us more about current employee requirements in this sector?*

Dr. Ha Dac Binh: The Vietnamese automotive manufacturing development strategy was formulated early on, and included a steady increase in the production of locally produced foreign vehicles, along with the development of Vietnamese car brands. Companies like Toyota, Honda, Daihatsu, Ford, and Mercedes have heavily invested in assembly factories in Vietnam, and Vietnamese companies, such as Hoa Binh Auto, Auto Truong Hai and, most recently, Vingroup's Vinfast have evolved. As the Vietnamese economy develops and drivers seek more safety and convenience in their own cars, demand for new automotive experts here has been increasing rapidly.

In 2019 alone, car consumption hit the 400,000 mark, up 100,000 from 2018. This has given the car sector a tremendous boost, leading to a rapid increase in the demand for skilled workers. At the same time, the industry is currently gradually moving towards electric-powered and self-driving vehicles. Unfortunately, educational institutions in Central Vietnam and elsewhere cannot presently satisfy this demand.



Dr. Ha Dac Binh, Dean of Electrical Engineering

Reporter: *Is that the reason DTU offers this new major in 2020, because of the population's increasing car use, Professor?*

Dr. Ha Dac Binh: Yes, with many years of experience in Electrical Engineering education, we are confident that we will be able to begin satisfying that need in Central Vietnam and the Central Highlands.

Reporter: *Automotive Engineering Technology includes mechanics, automation, electrical engineering and machine manufacturing. The new program provides both a general and a specialized education. However, with only 4.5 years to study, how is this course designed for students to qualify for employment and begin work immediately on graduation?*

Dr. Ha Dac Binh: First of all, students should thoroughly research the major to ascertain whether or not it suits their capabilities and ambitions. Automotive Engineering Technology involves mechanics, automation, electrical engineering and machine manufacturing, which enables students to manage vehicle operations, such as spare parts production, assembly, repair and efficiency enhancements.

We have created a curriculum ranging from basic courses, like material strength, machine principles, machine parts, hydraulic, pneumatic drive and control systems, to more advanced ones, on internal combustion engines, automotive calculations, safety systems, inspections and accessories. The curriculum logically sequences the topics, using the CDIO teaching method, a project-based approach will allow the student to learn the all the necessary major and supporting skills, such as teamwork, problem-solving and presentation skills. So 4.5 years should be sufficient to gain the necessary specialized, professional knowledge and skills for employment.



Automotive Engineering Technology students train in modern mechanics and electronics workshops

Reporter: *Automotive students worldwide are trained in large manufacturing workshops with the latest machinery, ensuring that they are entirely familiar with future work environment. What facilities does DTU offer to support them?*

Dr. Ha Dac Binh: DTU has invested in a mechanics workshop in block B on the Hoa Khanh Nam campus, with the latest CNC machines, laser cutters, lathes, mills, planes, drills and welding equipment. We have also teamed up with local automotive companies where students can intern.

Reporter: *Having provided an education in Electrical Engineering for many years, which experiences have assisted you in offering a new major in Automotive Engineering Technology this year Professor?*

Dr. Ha Dac Binh: For several years now, the Faculty of Electrical Engineering has successfully applied the CDIO project-based teaching method and gained American ABET accreditation in 2019. We also share two international programs with Purdue University in the US, in Electrical Engineering and Mechatronics, to improve the quality of education as we enter this new field.

Our Electrical Engineering students have already created several new products, including a smart bed, a robotic restaurant waiter, a smart mushroom cultivation container, a robot that checks for faults in iron bridges, an automatic vending machine and a drying oven. In the future, electric cars and self-driving cars will quickly become very important and gradually replace traditional ones. In anticipation, we have incorporated new courses related to this trend, such as automated car control, new automotive fuels for energy generation and self-driving technology. These characteristics help make the new DTU Automotive Engineering Technology program truly unique.

Reporter: *Thank you for your interesting answers Professor.*

In 2020, DTU will now enable eligible Automotive Engineering Technology students to qualify for the following:

Transcript scholarships: 700 scholarships worth from 500,000 to 2 million VND each, for applicants with high school transcript scores of 22 points or higher.

High grade scholarships: 720 DTU scholarships worth from 1 to 5 million VND each, for applicants with a total HSGE three-subject score from 3 to 10 points higher than the admissions minimum.

For further information about Automotive Engineering Technology major at DTU, see: [**The Faculty of Electrical Engineering**](#)

For detailed information, please contact:

The DTU Enrollment Center

254 Nguyen Van Linh, Danang

Hotlines: 1900.2252 - 0905.294390 - 0905.294391

Website: <http://tuyensinh.duytan.edu.vn>

Email: tuyensinh@duytan.edu

Facebook: [tuyensinhdtu](#); Zalo: 0905.294.390 - 0905.294.391

DTU

- The second Vietnamese university to obtain American ABET accreditation
- Ranked among Asia's top 500 universities by QS
- Ranked 1,854th in the top 2,000 universities worldwide and third of four in Vietnam by CWUR
- Ranked 1,147th in the top 2,500 universities worldwide and third of eight in Vietnam by URAP
- Ranked second of ten leading universities of Vietnam in international publications by the Nature Index

(Media Center)