



UPH
UNIVERSITAS PELITA HARAPAN

FaST
Faculty of Science and Technology



Faculty of Science & Technology

2024



Why Choose Faculty of Science & Technology at UPH

2 STUDY PROGRAMS 

with **excellent (Unggul)** from the Accreditation Board for Higher Education (BAN-PT)

The **only faculty** which has an actuarial program in Indonesia **accredited by the Society of Actuaries (SOA)**



The **1st**

Faculty among private universities in Indonesia which offers Food Technology program fully conducted in English



FaST has succeeded in achieving ISO 9001:2015 and ISO 21001:2018 certification for Educational Organizations Management system

88%

of faculty member with doctoral degrees

MORE THAN

20

STUDENTS

achievements in various academic and non-academic competition in the last three years





Our Programs



LV|S|M

Financial Engineering and Computational Risk Management

DEGREE

Sarjana Matematika (S.Mat.)

WHAT YOU WILL LEARN

- Investments
- Statistical and Probability Theory
- Non-parametric Statistics
- Financial Institutions and Markets
- Stochastics Processes
- Microeconomics and Macroeconomics
- Data Science and Predictive Analytics
- Machine Learning

OUTSTANDING FEATURES

- Providing insight into the application of mathematical methods to financial problems
- Strong focus on data science, machine learning, and computational techniques, our program equips students with the skills to tackle complex real-world challenges across various industries
- Our graduates emerge as proficient problem solvers and innovators, ready to make a significant impact as consultants in today's dynamic business landscape

CAREER OPPORTUNITIES

- Data Scientists
- Software Developer/Engineer
- Financial Analysts
- Financial Engineers
- Financial Product Developers
- Quantitative Analysts
- Portfolio Managers

LV|S|M

Actuarial & Business Mathematics

DEGREE

Sarjana Matematika (S.Mat.)

WHAT YOU WILL LEARN

- Financial Mathematics
- Life Insurance Mathematics
- Regression Analysis
- Time Series Analysis
- Loss Models
- Mathematical Modelling
- Reinsurance

OUTSTANDING FEATURES

- The only actuarial program in Indonesia that is accredited by the SOA
- The third-highest number of graduates who successfully become actuaries after ITB and UI
- Our comprehensive curriculum is carefully crafted to meet the stringent requirements for Validation by Educational Experience (VEE) credits, allowing students to seamlessly transition from coursework to certification.

CAREER OPPORTUNITIES

- Insurance actuarial analyst
- Actuarial consultant
- Business analyst
- Risk analyst
- Underwriter
- Investment analyst



LV|S|M

Food Technology – Food Processing and Innovation

FULL ENGLISH CLASS AVAILABLE

DEGREE

Sarjana Teknologi Pertanian (S.T. P.)

WHAT YOU WILL LEARN

- Food Product Development
- Functional Food
- Confectionery Technology
- Flavour Technology
- Milk Processing Technology

OUTSTANDING FEATURES

- Provides students with a strong foundation in food science and its application
- Industry-oriented program that will continuously drive the students to be able to apply their knowledge to real-life situations.
- Opportunity to pursue a joint degree with University of Newcastle, Australia (for international class)

LV|S|M

Food Technology - Food Business and Entrepreneurship

FULL ENGLISH CLASS AVAILABLE

DEGREE

Sarjana Teknologi Pertanian (S.T. P.)

WHAT YOU WILL LEARN

- Consumer Behaviour
- Macroeconomics and Industry Analysis
- Business Research Methods
- Branding & Marketing Management

OUTSTANDING FEATURES

- Provides students with a strong foundation in food science
- Producing potential food entrepreneur who can utilize technology and manage food business.

CAREER OPPORTUNITIES IN FOOD TECHNOLOGY

- Food Safety Auditor
- Food Product Development Specialist
- Sensory Scientist
- Food Regulatory Specialist
- Food Packaging Technologist
- Research and Development
- Food Microbiologist
- Food Consultant for Certifications
- Academician
- Food Entrepreneur



Supply Chain Management and Analytics

DEGREE

Sarjana Teknik (S.T.)

WHAT YOU WILL LEARN

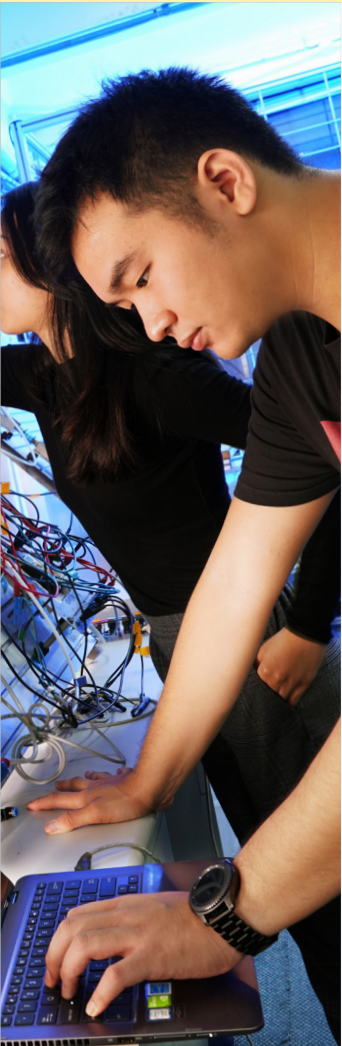
- Application of engineering principles in supply chain contexts.
- Data-driven decision-making.
- Lean principles and practices.
- Addressing challenges in international markets.
- Principles of sustainability in supply chains.
- Emerging technologies in supply chain management.
- Driving innovation for competitive advantage.

OUTSTANDING FEATURES

- Have an opportunity to participate in international multi-cultural & interdisciplinary team.
- Exploring the challenges and opportunities of managing supply chains in the digital age, including omnichannel fulfillment, last-mile delivery, and customer experience.
- A data-driven approach to decision-making across various topics, drawn from diverse case studies including transportation to find the optimal solutions.

OPPORTUNITIES

- Supply Chain Analyst or Data Analyst
- Operation Specialist
- Procurement Specialist
- Inventory Planner
- Project Manager
- Production, Planning, and Inventory Control (PPIC) Specialist
- Industrial Operation and Industrial Software (ERP) Specialist in manufacturing, retail and e-commerce, transportation and logistics, consulting, healthcare and technology industries/sectors



Additive Manufacturing

DEGREE

Sarjana Teknik (S.T.)

WHAT YOU WILL LEARN

- Understanding different 3D printing technologies
- Materials used in additive manufacturing
- Hands-on projects designing and producing complex parts.
- Developing creative problem-solving skills.
- Learning how to turn innovative ideas into marketable products.
- Real-world applications and case studies.
- Identifying business opportunities.

OUTSTANDING FEATURES

- Have an opportunity to participate in international multi-cultural & interdisciplinary team.
- Providing insights into the business aspects of additive manufacturing, including market trends, intellectual property considerations, and commercialization of additive manufacturing technologies and products.
- Exploring the use of additive manufacturing for rapid prototyping, tooling, and production of various service industries and manufacturing.

CAREER OPPORTUNITIES

- Additive Manufacturing Engineer
- Design Engineer
- Research and Development Specialist
- Production Specialist
- Quality Assurance Specialist
- Product Development
- Entrepreneur

Civil Engineering in Sustainable Construction

DEGREE

Sarjana Teknik (S.T.)

WHAT YOU WILL LEARN

- Construction Material Technology
- Land Surveying
- Soil Mechanics
- Engineering Mechanics
- Foundation Engineering
- Concrete, Steel, Timber, Road Structures
- Design of Seismic Resistant Structure
- Computational Modelling of Structure
- Civil Engineering
- Design Project Cost Estimation
- Construction Management
- Fluid Mechanics
- Transportation System
- Water Resources Management and Hydraulics Engineering
- Engineering Mathematics

OUTSTANDING FEATURES

- Professional Lecturers: Guided and taught by certified professional lecturers, who are foreign and domestic graduates in study programs that have been accredited A
- Sustainability Practices: Blend to civil engineering principles with cutting-edge sustainability practices, equipping you with a comprehensive skill set to address modern environmental challenges
- Industry Integration: Collaborate with industry leaders and sustainability experts, fostering invaluable connections and gaining firsthand knowledge of industry trends and best practices.
- Career Readiness: Our program not only provides technical expertise but also emphasizes leadership, communication, and critical thinking skills, ensuring you're prepared to drive positive change in the field of sustainable construction from day one of your career.

CAREER OPPORTUNITIES

- Civil Engineer
- Civil Engineering Consultant
- Contractor Developer
- Project Consultant
- Engineering Management Consultant
- Mining / Oil and Gas
- Sector Engineer
- Researchers



Electronics in Smart Industry and IoT

DEGREE

Sarjana Teknik (S.T.)

WHAT YOU WILL LEARN

- Robotics and Mechatronics
- Industrial Electronics
- Microcontrollers and Microprocessors
- Solar Energy, Optoelectronics
- Internet of Things
- Electronic Vehicle Technologies

OUTSTANDING FEATURES

- **Excellent national accreditation:** Achieve excellence with our "Unggul" accreditation, ensuring that your education meets the highest standards of quality and distinction.
- **World-class faculty:** Learn from distinguished Professors and Lecturers handpicked from renowned national and international universities, providing you with unparalleled expertise and insight.
- **Immersive learning:** Dive into the real-world application of your studies through firsthand experience in research and industry, equipping you with the practical skills and knowledge needed to thrive in any professional setting
- **Holistic approach:** Embrace a curriculum designed with deliberate sensitivity to the complex intersections of business technology, ethical and religious dimensions, and integrity in emerging technologies. We mold graduates who not only excel in their fields but also embody ethical leadership and innovation, setting new standards of excellence in the global arena
- **The curriculum** refers to international standards (IABEE) which focus on electronics and IoT for smart industries which include electric vehicle technology, renewable energy, ICT and Big Data, robotics and mechatronics

CAREER OPPORTUNITIES

- Data Scientist
- Electrical Engineer
- IoT Engineer
- Telecommunication Engineer
- Network Service Engineer
- IT System Engineer
- Software Developer
- IT Consultant
- Factory Automation and Control Engineer
- Robotic Engineer
- Research / Teaching Assistant

ICT and Big Data

DEGREE

Sarjana Teknik (S.T.)

WHAT YOU WILL LEARN

- Digital Communications
- Wireless/Mobile/Optical Communications
- Internet and Communication Networks
- Data Science
- Software Defined Radio
- Artificial Intelligence
- 4G/5G Systems

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- Software Developer
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- Factory Automation and Control Engineer
- Robotic Engineer
- Research / Teaching Assistant

INTERNATIONAL COLLABORATIVE LEARNING



Joint Degree Program

Sarjana Teknologi Pangan (at UPH)
+ **Bachelor of Food Science** and
Human Nutrition Joint program
with **The University of Newcastle,**
Australia (Only for International Class
in Food Processing and Innovation
Specialization)

INDUSTRIAL PARTNERS:

- PT ABC President Indonesia (Research and Internship)
- PT Agung Mulia Chemindo
- PT Collabit Sukses Bersama
- PT Esco Chemicals Mitrautama (MOU, Research Collaboration)
- Nutrifood (Research and Internship)
- Orang Tua Group (MOU, Internship, Lab Facility and Equipment Grant)
- PT. TOV Raja Semesta
- Other Food companies (Internship; request basis)
- Universitas Negeri Sebelas Maret (PKS, Tri Dharma)
- University of Newcastle, Australia (MOU, Dual Degree Program)

ACADEMIC PARTNERS:



Alumni & Student Testimony



Edwin Putra

Erp Senior Analyst in Singapore
Industrial Engineering UPH, 2006

"Acquiring expertise in ERP during my studies at Industrial Engineering UPH has greatly benefited my career as an ERP Senior Analyst in Singapore. The knowledge gained not only enriched my academic experience but also provided a substantial foundation that continues to contribute significantly to my current professional role."

Gerry Chandra

DATA SCIENTIST, OVO (PT VISIONET INTERNASIONAL)
Electrical Engineering UPH, 2004

UPH Dept. of EE acts as one of the stepping stones in my career journey. **All of the professors and lecturers are so aware of the latest update in the current industry and market.** It allows me to research more on the current trend of technologies and skills which most industries need. I'm so thankful to be part of UPH Dept. of Electrical Engineering, all of the experiences have shaped me into the person I am today."



Jessica Priscillia

Actuarial Analyst PT Asuransi Allianz Life Indonesia
Applied Mathematics UPH, 2008

"There are only a few universities that offers applied mathematics as a major, even less that offers actuarial mathematics as a minor. I started my study at UPH in 2008 and I have learned so much knowledge, not only an education which has a certain quality but also an education that can develop my social skills. What I've learned during the class is supported by **complete facilities.** The lectures are experts in teaching the subjects."



Angeline Aprilina

Master's Student of Food and Packaging Innovation at the University of Melbourne
Food Technology, 2013

"Science and technology that have been taught are very relevant and as capital sufficient to compete in the workplace."



Endrick Andrian

Contractor and Entrepreneur
Civil Engineering, 2013

"The experience of studying in UPH Civil Engineering course has been very helpful to begin and to develop my current career in the contractor field. The fast teaching and learning system (graduating in 3.5 years), a supportive academic supervisor, and campus facilities in a beautiful and modern university area make the learning periods very pleasant even in such a short period."



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UNDERGRADUATE ADMISSION CENTER

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