

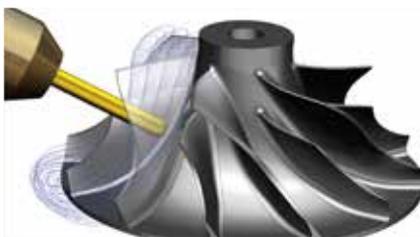


2ND AND 3RD YEAR SPECIALISATION

PRODUCT ENGINEERING

To train engineers capable of taking a global view of the design/industrialization process for a manufactured product, and acquiring the scientific and technological skills needed to understand how a product is developed and brought to market, integrating all stages of the life cycle.

Through in-depth study of the triumvirate of product/client/industrial system, this specialisation places the emphasis on technical expertise, but also on management and people skills.



COURSE CONTENT

- > Choice of Materials and their Deployment
- > Product design
- > Product modelling and development
- > Product use
- > Production compliance and stability
- > Rapid Manufacturing
- > Design of experiments
- > Programming control machines and objects
- > Project 1
- > Industrial Design
- > Processes
- > Costing, purchasing, and pricing
- > Production system
- > Project 2
- > Internship





INDUSTRY SECTORS

- > Automotive
- > Aeronautics
- > Naval
- > Construction
- > Machinery
- > Consultancy
- > Food industry

CAREER PROSPECTS

- > Research and development engineer
- > Product manager
- > Project manager in industrial development
- > Quality engineer
- > Project manager / staff for a design project, new product or service manager
- > Innovation manager

TEACHING STAFF

HEAD OF SPECIALISATION:

Matthieu Rauch

LECTURERS:

Jérôme Friant, Jean-Yves Hascoët, Olivier Legoff, Catherine Michel, Gilles Carabin, Jean-François Petiot, Matthieu Rauch, Hervé Thomas, Tugdual Le Néel

EXTERNAL SPEAKERS:

Airbus Atlantique, Faurecia, Dessouter Georges Renault, ENSAM, Audencia Business School, École de Design de Nantes Atlantique, CHU, L'Oréal

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EXAMPLES OF PREVIOUS PROJECTS

- > Study and development of a POMER - self-sufficient energy-generating unit fed by a hydrogen fuel cell (Pure E.T.)
- > Design and production of sports wheelchair prototypes for Paralympic athletes (Team 303)
- > Development of a system to recycle components and materials - (Veolia)
- > Design of a mobile system to carry out the regulatory load bearing tests of sports equipment (sportest)
- > Design and development of tools for escalator maintenance (Enerpac)
- > Study and development of a recharging station for VAE in the public space (Abri Plus)

EXAMPLES OF PREVIOUS INTERNSHIPS

- > Purchasing process analysis assistant (Nestlé)
- > Production methods engineer (Naval Group)
- > Industrialization and methods project engineer (Airbus Atlantic)
- > Product and project management of innovative cloud solutions (Bosch Engineering GmbH)
- > Product engineer baskets/maintenance (Decathlon)
- > Design and production of a model of a joint crossing for a mechanical cable transmission (CEA)
- > Intern Product Technical Engineer (Valeo Vision)
- > Biofabrication and segmentation in NX CAD software (Janus Engineering France)



graduate programme | Ingénieur grande école

École Centrale de Nantes, Direction de la communication, 2023