

Master in Industrial engineering

Product development 2nd year

Presentation

Between one and three modules of 6 ECTS are in English, depending on the programmes and the students' chosen options.

Objectives

This programme examines the subject from two perspectives, firstly the concepts used during product development, and secondly knowledge, both of which are essential to development and sources of innovation. The concepts are now largely digital: specifications, CAD files, digital mock-ups, PLM systems, etc. The ways of interacting with these data are continually evolving. Advanced optimisation methods are used to explore solutions in ever larger spaces and using multiple criteria.

The second perspective offers an analysis of the forms of knowledge used in design and industrialisation, ways of creating and maintaining this knowledge, methods of appropriation and exchange between experts from different professions, and specific modes related to business-to-business co-operative aspects.

Registration and scholarships

To be accepted for a master 2, you must hold a master 1 degree or equivalent. □ Your previous studies must be compatible with the master you wish to study. The recruitment and registration conditions are stated for each speciality. For the three programmes in French, the choice of programme is made after admission to the master in Industrial Engineering.

See Grenoble INP website : <http://www.grenoble-inp.fr/fr/formation/les-admissions>

Practicals informations :

- > **School** : Grenoble INP
- > **Duration** : 1 year
- > **Course type** : Initial and Continuing Education
- > **Location(s)** : Grenoble - Doyen Gosse
- > **Contacts** :

Programme director

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Program

Master in Industrial Engineering	Master in Industrial Engineering 2
<u>Title</u>	<u>Title of</u>
Teaching Unit Knowledge integration and col	Teaching Unit Internship and research paper – W
Teaching Unit Modelling and optimization in product development – WGUMODE9	
Teaching Unit Research in industrial engineering – WGURESE4	
Choice of advanced options for the product development programme (choose between 1 and 2)	
Teaching Unit Product representations – 4GUP0305	
Teaching Unit Integrated design: tools and methods – 5GUC0604	
Teaching Unit Advanced manufacturing – 5GUC0804	
Teaching Unit Innovation management – 5GUC1504	
Teaching Unit Advanced product simulation – 5GUC2504	
Choice of opening options for the product development programme (choose between 0 and 1)	
Teaching Unit Advanced economics for industrial engineering – 5GUC0504	
Teaching Unit iDesigner: tackling complexity by integration – 5GUC0904	
Teaching Unit Industrialisation: sustainable design of a workshop – 5GUC1004	
Teaching Unit Product industrialisation – 5GUC1104	
Teaching Unit Total quality management – 5GUC1404	
Teaching Unit Purchasing management – 5GUC1604	
Teaching Unit International project management – 5GUC1704	
Teaching Unit Production and the environment – 5GUC2304	
Teaching Unit Strategies and organisations – 5GUC2604	
Teaching Unit Industrial information systems – 5GUC2804	
Optional modules (optional)	
English for industrial engineering – 5GMC0218	