Université Paris-Saclay

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BUT1 Génie mécanique et productique

BUT (University technology degree)

Specialisation Génie mécanique et productique

Language(s) of instruction

French

The **Bachelor of Mechanical and Production Engineering (BUT GMP)** is a three-year program that offers specialized training in the design, manufacturing, industrial management, and optimization of mechanical

and multi-technology systems. It addresses current technological, industrial, societal, and environmental challenges. The program prepares highly versatile technicians and serves as a pathway to engineering schools, aligning with the evolving needs of tomorrow’s industry.

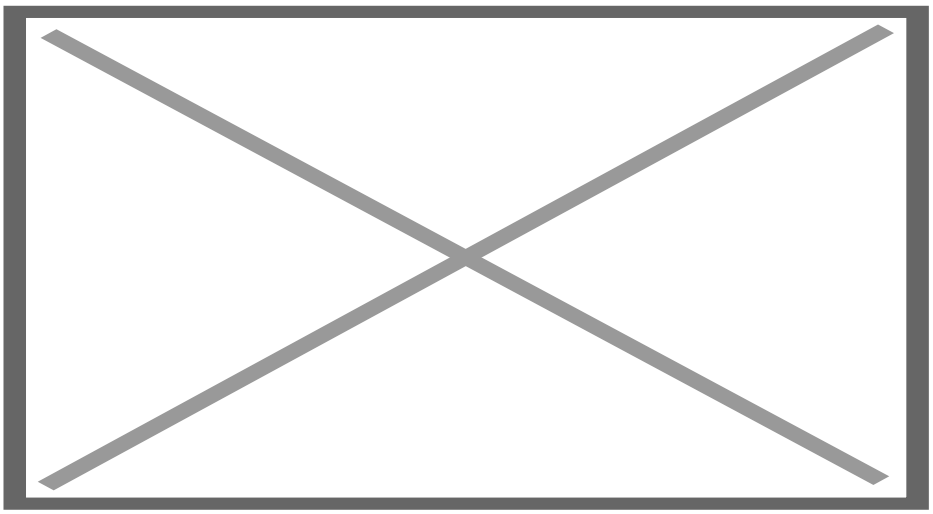
The program is structured over three years (six semesters) and is equivalent to 180 ECTS credits, granting this national degree the academic level of a Bachelor's (Licence). It combines theoretical coursework, practical lab sessions, project-based learning, and professional immersion in industry. The curriculum follows the national program for the Mechanical and Production Engineering specialization, which is common to all University Institutes of Technology (IUTs) in France.

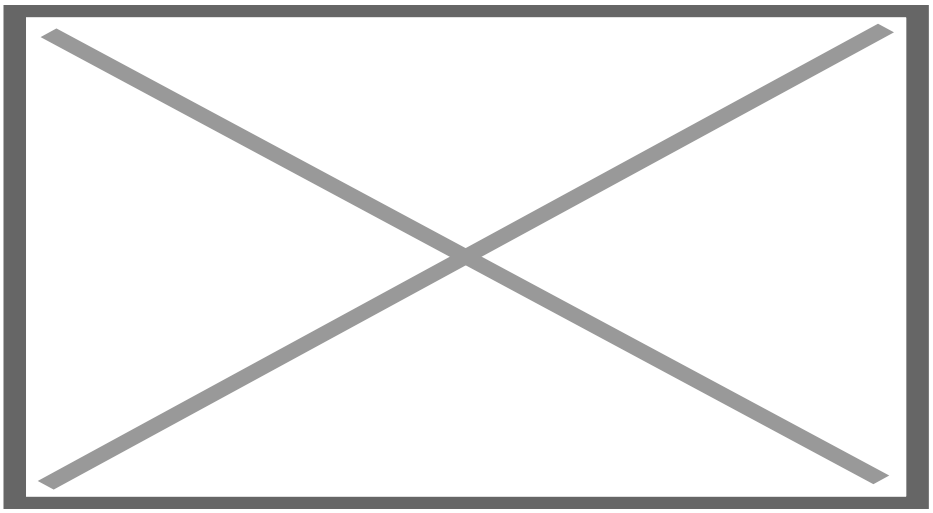
Out of the 2,600 total hours of instruction over three years, at least 50% are dedicated to hands-on training and real-world professional situations.

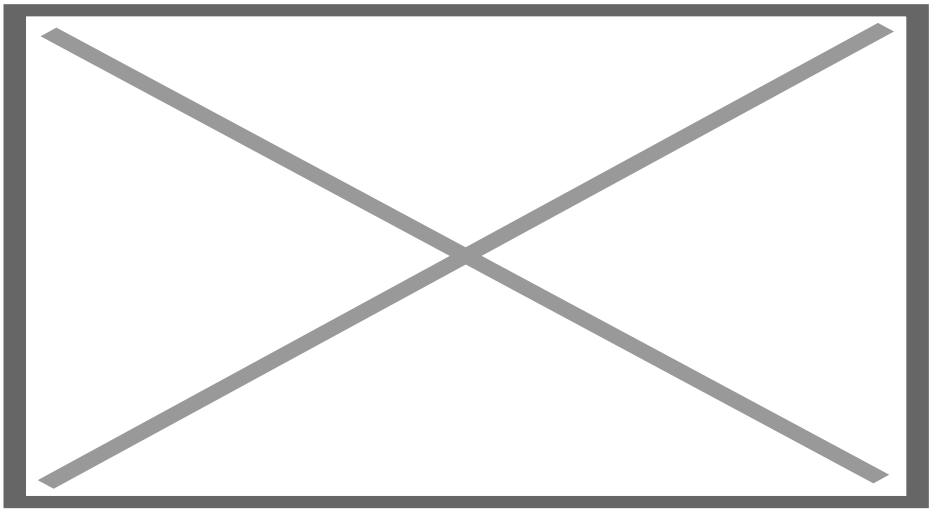
The program is available in a full-time format, which includes a 12-week internship in the second year and a 14-week internship in the third year.

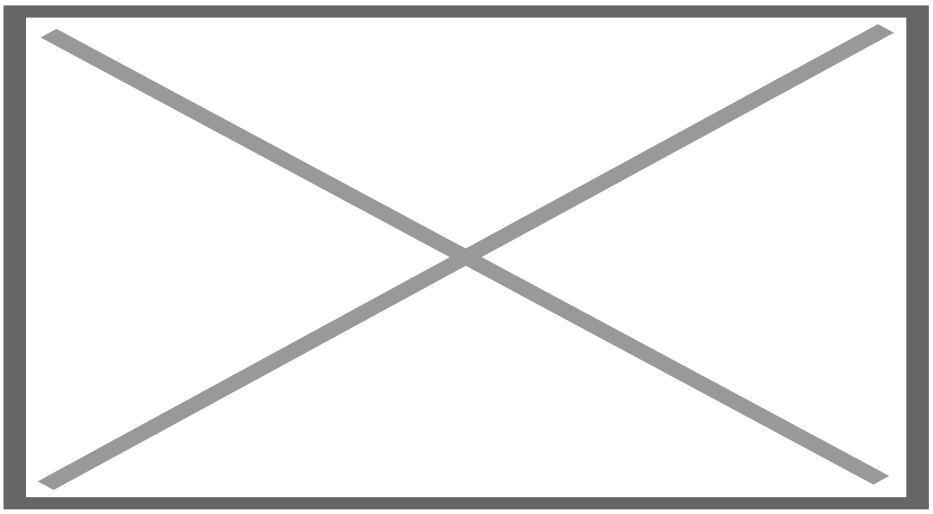
It is also available through a work-study pathway. At the IUT of Cachan, this alternating school/work format is open from the second year (BUT2 and BUT3) or from the third year only (BUT3).

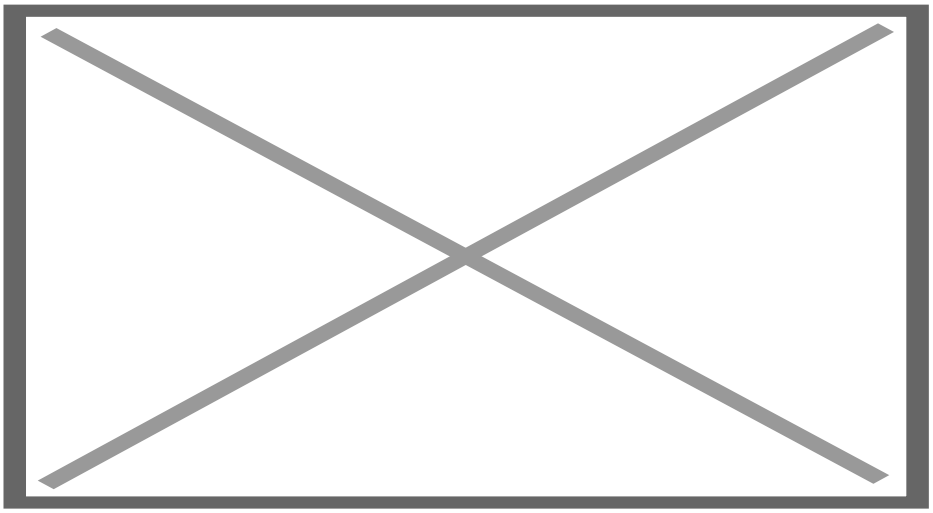
Télécharger la fiche détaillée
Apply Now











Information

- Overview
- Application requirements
- Schedule

Présentation

Skills

The **Bachelor in Mechanical and Production Engineering (BUT GMP)** aims to train professionals over three years who are capable of designing, developing, industrializing, and optimizing mechanical products or systems to meet the evolving needs of industry sectors and professions.

Key sectors include aerospace, transportation (automotive, rail, naval), precision mechanics and tooling, robotics, and transformation industries (plastics, metallurgy, etc.). Thanks to the program’s versatility, graduates can also pursue careers in diverse fields such as energy, special machinery, construction and metal structures, agri-food, and medical industries.

This comprehensive program provides students with a global understanding of mechanical and multi-technology systems, industrial processes, and the technical, economic, and organizational aspects specific to industry. Students gain the skills to manage the full product lifecycle — from needs analysis and design to production implementation and continuous improvement.

The BUT GMP program is designed to continuously adapt to contemporary industrial challenges: technological innovation, industrial performance, energy transition, digitalization, and sustainable development. It prepares students to operate effectively in various industrial contexts, promoting an integrated approach to design, industrialization, and production functions.

Built on a practical, project-based, and internship-driven pedagogy, the program equips graduates with strong operational capabilities, adaptability, and the ability to grow within industrial environments.

In addition, the BUT GMP program serves a dual purpose: enabling direct entry into mechanical and production-related careers, while also providing a solid academic foundation for further studies in engineering schools or master's programs.

Objectives

The **Bachelor in Mechanical and Production Engineering (BUT GMP)** aims to train professionals over three years who are capable of designing, developing, industrializing, and optimizing mechanical products or systems to meet the evolving needs of industry sectors and professions.

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Admission

Capacity

Available Places

110

Target Audience and Entry Requirements

The **Bachelor in Mechanical and Production Engineering (BUT GMP)** is open to students holding a Technological Baccalaureate (STI2D) or a General Baccalaureate. Recommended subject specialties include Mathematics, Digital and Computer Science (NSI), Engineering Sciences (SI), and Physics-Chemistry, though other subject combinations are also welcome.

Students who choose the BUT GMP should have a genuine interest in industry and industrial careers. They should be comfortable working in a digital and hands-on environment with industrial tools and equipment. Beyond scientific, technological, and experimental curiosity, teamwork skills are essential, as many learning activities are based on group projects and practical work.

Finally, motivation, commitment, and good organizational skills are key to succeeding in this demanding and professionally oriented program.

Période(s) de candidature

ParcourSup Platform

From January 19th to March 12th, 2026

Programme

BUT1 GMP - Formation Initiale

Spécifier les exigences technico-économiques industrielles (BUT1 GMP)

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	distanc learni cours
UE 1.1 (BUT1 GMP)	8	Semestre 1							

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	distanc learni cours

UE 1.1 (BUT1 GMP)

ECTS : 8
Semester: Semestre 1
Language(s) of instruction
Français
Remote teaching
non
Type of assessment
Evaluation Continue Intégrale

UE 2.1 (BUT1 GMP)	6	Semestre 2

UE 2.1 (BUT1 GMP)

ECTS : 6
Semester: Semestre 2
Language(s) of instruction
Français
Remote teaching
non
Type of assessment
Evaluation Continue Intégrale

Déterminer la solution conceptuelle (BUT1 GMP)

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	distanc learni cours
UE 1.2 (BUT1 GMP)	9	Semestre 1							

UE 1.2 (BUT1 GMP)

ECTS : 9
Semester: Semestre 1
Language(s) of instruction
Français
Remote teaching
non
Type of assessment
Evaluation Continue Intégrale

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	distanc learni cours
UE 2.2 (BUT1 GMP)	11	Semestre 2							

UE 2.2 (BUT1 GMP)

ECTS : 11
Semester: Semestre 2
Language(s) of instruction
Français
Remote teaching
non
Type of assessment
Evaluation Continue Intégrale

Concrétiser la solution technique retenue (BUT1 GMP)

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	distanc learni cours
UE 1.3 (BUT1 GMP)	8	Semestre 1							

UE 1.3 (BUT1 GMP)

ECTS : 8
Semester: Semestre 1
Language(s) of instruction
Français
Remote teaching
non
Type of assessment
Evaluation Continue Intégrale

UE 2.3 (BUT1 GMP)	8	Semestre 2

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	distanc learni cours

UE 2.3 (BUT1 GMP)

ECTS : 8
Semester: Semestre 2
Language(s) of instruction
Français
Remote teaching
non
Type of assessment
Evaluation Continue Intégrale

Gérer le cycle de vie du produit et du système de production (BUT1 GMP)

Subjects	ECTS	Semester	Lecture	directed study	practical class	Lecture/directed study	Lecture/practical class	directed study/practical class	distanc learni cours
UE 1.4 (BUT1 GMP)	5	Semestre 1							

UE 1.4 (BUT1 GMP)

ECTS : 5
Semester: Semestre 1
Language(s) of instruction
Français
Remote teaching
non
Type of assessment
Evaluation Continue Intégrale

UE 2.4 (BUT1 GMP)	5	Semestre 2							

UE 2.4 (BUT1 GMP)

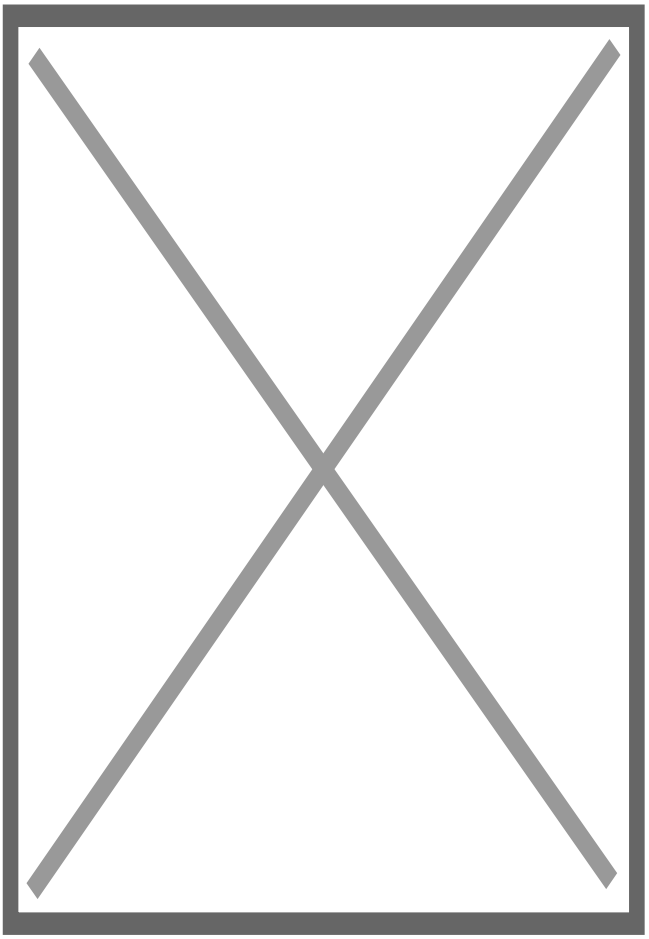
ECTS : 5
Semester: Semestre 2
Language(s) of instruction
Français
Remote teaching
non
Type of assessment
Evaluation Continue Intégrale

Teaching Location(s)

CACHAN

Training campus

Javascript est requis pour visualiser cette carte.



Cachan

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Voir
Student restaurant (CROUS)
Student residence
Sports facilities

Contact

- **François Thiebaut**
- **Carine KALCK**
- **William FOURMENTAL**

http://institut-pascal.universite-paris-saclay.fr/formation/genie-mecanique-et-productique/but1-genie-mecanique-et-productique