

Double Degree

Mechatronics and Smart Technology Engineering (UniBg) & Mechatronics (Uni Stuttgart)

study plan

Course Structure - Curriculum Mechatronics

SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4
UniBg	UniBg	Uni Stuttgart	Uni Stuttgart
Sustainable Energy (9 ECTS) Virtual and Physical Prototyping + Advanced Machine Design (module VPP) (6 ECTS) Smart sensors and electronic systems (9 ECTS) Functional design and dynamic modeling of mechanical systems (6 ECTS)	Power drive systems for mechanical machinery and vehicles (6ECTS) Mechanical vibrations (6 ECTS) Fundamentals of control systems OR Control system technology* (6 ECTS) Virtual and Physical Prototyping + Advanced Machine Design (module AMD) (6 ECTS) Choice between (6 ECTS): • Trasmissione del calore • Meccanica dei robot • IT architecture in production • Laboratorio di elettronica+Functional design of mechatronic systems • Progettazione FEM • Innovazione di prodotto e di processo • Industrial plant design and simulation	Micro Technology and Microsystems Technology (6 ECTS) Control Technology of Machine tools and Industrial Robots (6 ECTS) Research Project (18 ECTS)	Thesis work and final defense (30 ECTS)
30 ECTS	30 ECTS	30 ECTS	30 ECTS



Course Structure - Curriculum Smart Technology Engineering

SEMESTER 1	SEMESTER 2	SEMESTER 3	SEMESTER 4
UniBg	UniBg	Uni Stuttgart	Uni Stuttgart
Sustainable Energy + Thermal Physics for advanced technology (module SE) (9 ECTS) Sustainable Energy + Thermal Physics for advanced technology (module TP) (6 ECTS) Virtual and Physical Prototyping + Advanced Machine Design (module VPP) (6 ECTS) Smart sensors and electronic systems (9 ECTS)	Virtual and Physical Prototyping + Advanced Machine Design (module AMD) (6 ECTS) Industrial plant design and simulation (6 ECTS) Materials for advanced engineering applications (6 ECTS) Data science and automation (6 ECTS) Mechanical vibrations (6 ECTS)	Micro Technology and Microsystems Technology (6 ECTS) IT architecture in production (6 ECTS) Research Project (18 ECTS)	Thesis work and final defense (30 ECTS)
30 ECTS	30 ECTS	30 ECTS	30 ECTS

