

List of recommended courses from other programs (12 credits max. with Specialization "Materials research and development" / 6 credits max. with Minor)

Code	Courses	Lecturers	Program	Semesters		exams
				Fall	Spring	
<p align="center">Elective courses from other programs (max. 12 ECTS credits if Specialization Materials research and development / 6 ECTS credits if Minor)</p>						
BO-498	Entrepreneurship in food & nutrition science	Foige/L. Bur /on der Beek	GGC		4	during semester
CH-413	Nanobiotechnology	Stettiner	GGC		3	written
CH-421	Analysis for energy storage	Hu Xie	GGC	2	3	written
CHE-201	Introduction to chemical engineering	Karammiki	GGC	3	2	written
CHE-203	Introduction au génie chimique et à l'énergie IP	Bhuossani	GGC	3	2	during semester
CHE-402	Diffusion and mass transfer	Agarwal	GGC	3	2	written
CH-410	Introduction to chemical engineering	Stettiner	GGC	3	2	written
CH-436	Pharmaceutical biotechnology	Stettiner	GGC	3	2	written
CML-321	Microprocesses	Larsson	GGC	3	2	oral
CML-322	Méthodes numériques des solides et structures	Stettiner	GGC	3	2	oral
CML-331	Dimensionnement des structures en bois	Stettiner	GGC	3	2	oral
CML-411	Chemical engineering	Mario Moller	GGC	3	2	oral
CML-444	Mathematical modeling for engineers	Stettiner	GGC	3	2	written
CML-510	Quantitative imaging for engineers	Stettiner	GGC	3	2	during semester
CML-532	Materials et structures	Stettiner	GGC	3	2	oral
EE-531	Nanoelectronics	Stettiner	EE	3	2	written
EE-536	Physical models for micro and nanosystems	Sis	EE	3	2	during semester
EE-592	Space mission design and operations	Stettiner	EE	3	2	oral
ENG-410	Food safety and quality management	Stettiner	ME/ADM	3	2	written
ENG-413	Science des denrées alimentaires	Richard C. Thammann Ph./Biology	ME/ADM	3	2	written
ENG-414	Food safety and quality management	Stettiner	GGC	3	2	written
ENG-415	Chemistry of food processes	Stettiner	GGC	3	2	written
ENG-436	Food biotechnology	Stettiner	GGC	3	2	written
ENG-445	Energy and comfort in buildings	Ghoshaly/Litina/Serna	GGC	3	2	written
ENV-220	Fundamentals in ecology	Hahn-Grossheid	SE		3	written
ENV-411	Environmental management	Stettiner	SE		3	written
ENV-410	Environmental management	Stettiner	SE		3	written
ENV-500	Social waste engineering	Stettiner	SE	4	1	during semester
ENV-501	Material flow analysis and resource management	Stettiner	SE	4	1	written
ENV-525	Physics and hydrology of snow	Stettiner	SE	4	1	written
ME-212	Processos de produção	Stettiner	GM	2	4	written
ME-211	Social mechanics	Stettiner	GM	2	4	written
ME-312	Mechanics of fluids	Stettiner	GM	3	2	written
ME-342	Introduction aux biomécaniques	Stettiner	GM	3	2	written
ME-400	Energy conversion and renewable energy	Markhal Nguyen	GM	4	2	written
ME-411	Introduction to additive manufacturing	Stettiner/Bruigger/Moser	GM	3	2	written
ME-419	Production management	Kabali	GM	4	2	during semester
ME-428	Micro/nanomechanical devices	Stettiner	GM	4	2	written
ME-451	Advanced energetics	Stettiner	GM	3	2	written
ME-460	Renewable energy (for MPE)	Stettiner	GM	3	2	written
ME-471	Chemical flow simulation	Stettiner/Jan Herle	GM	3	2	written
ME-481	Biomechanics of the cardiovascular system	Stettiner	GM	3	2	written
ME-481	Biomechanics of the cardiovascular system	Stettiner	GM	3	2	written
ME-516	Lifecycle performance of product systems	Stettiner	GM	3	2	during semester
MICRO-534	Advanced MEMS & mechatronics	Stettiner	MT	3	2	oral
MICRO-532	Physique des composants semi-conducteurs	Stettiner	MT	3	2	oral
MICRO-530	MEMS	Stettiner	MT	4	2	written
MICRO-531	MEMS fabrication technologies	Stettiner	MT	4	2	written
MICRO-420	Selected topics in advanced optics	Stettiner	MT	3	2	oral
MICRO-426	Laser fundamentals and applications for engineers (gas donné en 24)	Stettiner	MT	3	2	oral
MICRO-448	Manufacturing systems and supply chain dynamics	Stettiner/Gallay	MT	3	2	oral
MPE-411	System laws & simulations in micro & nanosystems	Stettiner	MT	2	1	oral
MPE-412	MEMS	Stettiner	MT	2	1	oral
MPE-413	MEMS	Stettiner	MT	2	1	oral
MPE-414	MEMS	Stettiner	MT	2	1	oral
MPE-415	MEMS	Stettiner	MT	2	1	oral
MPE-416	MEMS	Stettiner	MT	2	1	oral
MPE-417	MEMS	Stettiner	MT	2	1	oral
MPE-418	MEMS	Stettiner	MT	2	1	oral
MPE-419	MEMS	Stettiner	MT	2	1	oral
MPE-420	MEMS	Stettiner	MT	2	1	oral
MPE-421	MEMS	Stettiner	MT	2	1	oral
MPE-422	MEMS	Stettiner	MT	2	1	oral
MPE-423	MEMS	Stettiner	MT	2	1	oral
MPE-424	MEMS	Stettiner	MT	2	1	oral
MPE-425	MEMS	Stettiner	MT	2	1	oral
MPE-426	MEMS	Stettiner	MT	2	1	oral
MPE-427	MEMS	Stettiner	MT	2	1	oral
MPE-428	MEMS	Stettiner	MT	2	1	oral
MPE-429	MEMS	Stettiner	MT	2	1	oral
MPE-430	MEMS	Stettiner	MT	2	1	oral
MPE-431	MEMS	Stettiner	MT	2	1	oral
MPE-432	MEMS	Stettiner	MT	2	1	oral
MPE-433	MEMS	Stettiner	MT	2	1	oral
MPE-434	MEMS	Stettiner	MT	2	1	oral
MPE-435	MEMS	Stettiner	MT	2	1	oral
MPE-436	MEMS	Stettiner	MT	2	1	oral
MPE-437	MEMS	Stettiner	MT	2	1	oral
MPE-438	MEMS	Stettiner	MT	2	1	oral
MPE-439	MEMS	Stettiner	MT	2	1	oral
MPE-440	MEMS	Stettiner	MT	2	1	oral
MPE-441	MEMS	Stettiner	MT	2	1	oral
MPE-442	MEMS	Stettiner	MT	2	1	oral
MPE-443	MEMS	Stettiner	MT	2	1	oral
MPE-444	MEMS	Stettiner	MT	2	1	oral
MPE-445	MEMS	Stettiner	MT	2	1	oral
MPE-446	MEMS	Stettiner	MT	2	1	oral
MPE-447	MEMS	Stettiner	MT	2	1	oral
MPE-448	MEMS	Stettiner	MT	2	1	oral
MPE-449	MEMS	Stettiner	MT	2	1	oral
MPE-450	MEMS	Stettiner	MT	2	1	oral
MPE-451	MEMS	Stettiner	MT	2	1	oral
MPE-452	MEMS	Stettiner	MT	2	1	oral
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MPE-457	MEMS	Stettiner	MT	2	1	oral
MPE-458	MEMS	Stettiner	MT	2	1	oral
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MPE-461	MEMS	Stettiner	MT	2	1	oral
MPE-462	MEMS	Stettiner	MT	2	1	oral
MPE-463	MEMS	Stettiner	MT	2	1	oral
MPE-464	MEMS	Stettiner	MT	2	1	oral
MPE-465	MEMS	Stettiner	MT	2	1	oral
MPE-466	MEMS	Stettiner	MT	2	1	oral
MPE-467	MEMS	Stettiner	MT	2	1	oral
MPE-468	MEMS	Stettiner	MT	2	1	oral
MPE-469	MEMS	Stettiner	MT	2	1	oral
MPE-470	MEMS	Stettiner	MT	2	1	oral
MPE-471	MEMS	Stettiner	MT	2	1	oral
MPE-472	MEMS	Stettiner	MT	2	1	oral
MPE-473	MEMS	Stettiner	MT	2	1	oral
MPE-474	MEMS	Stettiner	MT	2	1	oral
MPE-475	MEMS	Stettiner	MT	2	1	oral
MPE-476	MEMS	Stettiner	MT	2	1	oral
MPE-477	MEMS	Stettiner	MT	2	1	oral
MPE-478	MEMS	Stettiner	MT	2	1	oral
MPE-479	MEMS	Stettiner	MT	2	1	oral
MPE-480	MEMS	Stettiner	MT	2	1	oral
MPE-481	MEMS	Stettiner	MT	2	1	oral
MPE-482	MEMS	Stettiner	MT	2	1	oral
MPE-483	MEMS	Stettiner	MT	2	1	oral
MPE-484	MEMS	Stettiner	MT	2	1	oral
MPE-485	MEMS	Stettiner	MT	2	1	oral
MPE-486	MEMS	Stettiner	MT	2	1	oral
MPE-487	MEMS	Stettiner	MT	2	1	oral
MPE-488	MEMS	Stettiner	MT	2	1	oral
MPE-489	MEMS	Stettiner	MT	2	1	oral
MPE-490	MEMS	Stettiner	MT	2	1	oral
MPE-491	MEMS	Stettiner	MT	2	1	oral
MPE-492	MEMS	Stettiner	MT	2	1	oral
MPE-493	MEMS	Stettiner	MT	2	1	oral
MPE-494	MEMS	Stettiner	MT	2	1	oral
MPE-495	MEMS	Stettiner	MT	2	1	oral
MPE-496	MEMS	Stettiner	MT	2	1	oral
MPE-497	MEMS	Stettiner	MT	2	1	oral
MPE-498	MEMS	Stettiner	MT	2	1	oral
MPE-499	MEMS	Stettiner	MT	2	1	oral
MPE-500	MEMS	Stettiner	MT	2	1	oral