

The following study and examination regulations were
examined and approved at the 457th meeting of the
Senate
on 2nd of July 2025.

Only these study and examination regulations are
therefore binding!

§ XX

Study and examination regulations for the International Master of Technical Innovation (IMTI) program at Heilbronn University of Applied Sciences

- (1) The total scope of the courses required for the successful completion of the degree program is 48 semester hours per week and 90 ECTS. The standard period of study is three semesters.
- (2) Credit points reflect the average student workload and are measured in accordance with the European Credit Transfer and Accumulation System (ECTS) (ECTS points, ECTS credit points or ECTS credits). One ECTS point corresponds to a workload of 25 hours.
- (3) The courses required for the successful completion of the degree program are listed in Table 1 for the start of the winter semester and Table 2 for the start of the summer semester. The module handbook regulates the duration and form of examinations. Changes to the module handbook are decided by the responsible examination board with the approval of the respective study commission and take effect at the earliest in the following semester after announcement. The courses are held in English. There are exceptions for language courses and “Advised Studies”, which can be held in German.

Table 1: IMTI courses at the start of the winter semester

Sem.	Course					Examination		ECTS
	EDP-No.	Module-No.	Title	Type	Scope in SHPW	Type	Duration in mins.	
1	293550	M1	Sustainable Product Development		4			5
	293551		Innovation Management		2			
	293552		Sustainability and Ethics		2			
	293560	M3	Advanced Automation		4			5
	293571		Embedded and Edge Systems		2			
	293572		Industrial Software Engineering		2			
	293590	M5	Strategic Technologies 1		4			5
			Elective subject according to paragraph (5)		2			
	293610	M7	Portfolio Optimization 1		4			5
			Subjects according to paragraph (6)		4			
	293230	M9	Applied Research Studies		8			10
	293631		Entrepreneurship in R&D		2			
	293632		Research Project		6			
Sum 1st Sem					24			30
2	293560	M2	Global Development Management		4			5
	293561		Product and Engineering Design		2			
	293562		Intercultural Communication		2			
	293580	M4	Intelligent Data Systems		4			5
	293581		AI in Technical Systems		2			
	293582		Industrial Data Analytics		2			
	293600	M6	Strategic Technologies 2		4			5
			Elective subject according to paragraph (5)					
	293620	M8	Portfolio Optimization 2		4			5
			Subjects according to paragraph (6)					
	293640	M10	Applied Development Studies		8			10
	203641		Leadership in R&D		2			
293642		Development Project		6				
Sum 2nd Sem					24			30
3	293650	M11	Master Thesis					
	293651		Master Thesis					28
	293652		Master Thesis Colloquium					2
Sum 3rd Sem.								30
Sum Master								90

Table 2: IMTI Courses at the start of the summer semester

Sem.	Course					Examination		ECTS
	EDP-No.	Module-No.	Title	Type	Scope in SHPW	Type	Duration in mins.	
1	293560	M2	Global Development Management		4			5
	293561		Product and Engineering Design		2			
	293562		Intercultural Communication		2			
	293580	M4	Intelligent Data Systems		4			5
	293581		AI in Technical Systems		2			
	293582		Industrial Data Analytics		2			
	293600	M6	Strategic Technologies 2		4			5
			Elective subject according to paragraph (5)					
	293610	M7	Portfolio Optimization 1		4			5
			Subjects according to paragraph (6)		4			
	293640	M10	Applied Development Studies		8			10
	293641		Leadership in R&D		2			
	293642		Development Project		6			
Sum	1st Sem.				24			30
2	293550	M1	Sustainable Product Development		4			5
	293551		Innovation Management		2			
	293552		Sustainability and Ethics		2			
	293570	M3	Advanced Automation		4			5
	293571		Embedded and Edge Systems		2			
	293572		Industrial Software Engineering		2			
	293590	M5	Strategic Technologies 1		4			5
			Subjects according to paragraph (5)					
	293620	M8	Portfolio Optimization 2		4			5
			Subjects according to paragraph (6)		4			
	293630	M9	Applied Research Studies		8			10
	293631		Entrepreneurship in R&D		2			
	293632		Research Project		6			
Sum	2nd Sem				24			30
3	293650	M11	Master Thesis					
	293651		Master Thesis					28
	293652		Master Thesis Colloquium					2
Sum	3rd Sem.							30
Sum	Master							90

- (4) The module examinations of the Master's degree program are listed in Table 3. The type and duration of examinations can be found in the module handbook as amended.

Table 3: Module examinations in the Master's degree program IMTI

Examination		Weight of the grade of the examination performance	Weight of the module grade for the grade of the Master's degree
EDP-No.	Title		
293550	M1 Sustainable Product Development	5	5
293560	M2 Global Development Management	5	5
293570	M3 Advanced Automation	5	5
293580	M4 Intelligent Data Systems	5	5
293590	M5 Strategic Technologies 1	5	5
293600	M6 Strategic Technologies 2	5	5
293610	M7 Portfolio Optimization 1	5	5
293620	M8 Portfolio Optimization 2	5	5
293630	M9 Applied Research Studies	10	10
293640	M10 Applied Development Studies	10	10
293650	M11 Master Thesis	30	30
Sum			90

- (5) Elective area: Students select elective subjects from the elective catalogue in the module handbook with a total of 5 ECTS credits each to fulfil modules M5 and M6 (Strategic Technologies 1 & 2). The list of available electives is decided by the responsible examination board in an elective catalogue and published in the module handbook.
- (6) In order to support students with different language skills in the German language, different subjects should be completed. The examinations "293610 M7 Portfolio Optimization 1" and "293620 M8 Portfolio Optimization 2" each have a scope of 5 ECTS and are made up of the subjects in Table 4. Students without German language skills or below A1 level should take both courses "German as a foreign language". Students with basic knowledge between A1 and A2 level should take "Advised Studies" in the first semester and "German as a foreign language 2" in the second semester. Students with language skills above A2 should take "Advised Studies" in both semesters.

Table 4: Portfolio Optimization 1 and 2

Course					Examination		ECTS
EDP-No.	Module - No.	Title	Type	Scope in SHPW	Type	Duration in Mins.	
293610	M7	Portfolio Optimization 1		4			5
293611	M7.1	German as a foreign language 1		4			
293612	M7.2	Advised Studies		4			
293620	M8	Portfolio Optimization 2		4			5
293621	M8.1	German as a foreign language 2		4			
293622	M8.2	Advised Studies		4			

- (7) The Master's certificate contains the module grades of all module examinations listed in Table 3 of paragraph (4) and the title of the Master's thesis. The module grade of an examination is weighted with the ECTS points of the course.

The overall grade of the Master's certificate is calculated from the weighted arithmetic mean of the module grades and the grade of the Master's thesis, whereby the weights for the individual grades are specified in Table 3 of paragraph (4).

- (8) Special regulation for the Master's thesis and the final colloquium: Both examinations (Master's thesis and final colloquium) must be passed. If one part of the examination is not passed, both parts of the examination must be repeated.
- (9) The academic degree Master of Science (M.Sc.) is awarded with the Master's certificate in the Master's degree program "International Master of Innovation Management" (IMTI).
- (10) These study and examination regulations come into force with effect from XX.

Heilbronn, July 2nd 2025

Vice-Rectorate for Studies and Teaching

Signed:

Prof. Dr. Ulrich Brecht