



الجامعة الألمانية الأردنية
German Jordanian University

German Jordanian University

**Pre-Year Bachelor of Engineering in
Hydrogen Technology (Transnational)
Non-Granting Degree (Hosted Program)**

Study Plan 2023

I. Program Objectives

The objective of GJU Hydrogen Technology Pre-Year (College Preparatory Program) is to prepare students with the required technical and language skills to succeed in the “Bachelor of Engineering in Hydrogen Technology (Transnational)” hosted program offered by THWS.

II. Learning Outcomes

The Pre-Year provides potential “Bachelor of Engineering in Hydrogen Technology (Transnational)” students with an understanding of fundamental science required to acquire :

- a. An ability to apply knowledge of mathematics and basic sciences.
- b. An ability to function in a culturally diverse environment.
- c. Improved reading and writing skills in the German Language.

Course Delivery Methods

Courses are taught through face-to-face (F2F) learning and are delivered at the university campus.

III. Admission Requirements

To apply for admission, the following minimum requirements must be met:

- a. 80% General High School Examination (Tawjihi) or Equivalent
- b. Proven English Proficiency

Placement Tests

Applicants must sit for placement tests in the English Language and Mathematics to determine whether the applicant may be required to take remedial courses in the mentioned subjects. Depending on or the applicant scores in the placement tests, some of the following 3-credit-hour remedial courses are required:

Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
ENGL0098	Elementary English	3	3	3	-	F2F	Placement test
ENGL0099	Intermediate English	3	3	3	-	F2F	ENGL0098
MATH0099	Pre-Math	3	3	3	-	OL	Placement test
Total		9	9	9	-		

- Remedial courses are to be completed and passed within the first year of enrollment.
- Passing grade of remedial courses is 60%.
- ECTS (B.Sc.): is the European Credit Transfer and Accumulation, One ECTS is equivalent to 30 actual workload hours.

IV. Framework for B.Sc. Degree (Credit hours)

Classification	Credit Hours			ECTS		
	Compulsory	Elective	Total	Compulsory	Elective	Total
Program Requirements	37	03	40	58	5	63
Total	37	03	40	58	5	63

Course Delivery Method	Credit Hours	Percentage
Face-to-Face Courses	40	100%
Total	40	100%

1. Program Requirements (40 credit hours)

1.1. Program Requirements (Compulsory): (37 credit hours)

Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
CHEM103	General Chemistry	3	4	3	-	F2F	CHEM106 ^{co}
CHEM106	General Chemistry Lab	1	1	-	3	F2F	CHEM103 ^{co}
CS116	Computational Fundamentals	3	5	3	-	F2F	CS1160 ^{co}
CS1160	Computational Fundamentals Lab	1	1	-	3	F2F	CS116 ^{co}
ENE211	Electrical Circuits I	3	5	3	-	F2F	MATH101, PHYS103, ENE213 ^{co}
ENE213	Electrical Circuits Lab	1	1	-	3	F2F	ENE211 ^{co}
GERL101B2	German I	3	5	9	-	F2F	-
GERL102B2	German II	3	5	9	-	F2F	GERL101B2
GERL201B2	German III	3	5	6	-	F2F	GERL102B2
GEBC202B2	German IV	3	5	9	-	F2F	GERL201B2
MATH101	Calculus I	3	5	3	-	F2F	-
MATH102	Calculus II	3	5	3	-	F2F	MATH101
PHYS103	Physics I	3	5	3	-	F2F	-
PHYS104	Physics II	3	5	3	-	F2F	PHYS103, PHYS106 ^{co}
PHYS106	General Physics Lab	1	1	-	3	F2F	PHYS104 ^{co}
Total		37	58	54	12		

1.2. Program Requirements (Elective): (3 credit hours)

Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
ECHEM102	Basics of Electrochemical Systems	3	5	3	-		CHEM103 ^{co}
IE0121	Probability and Statistic	3	5	3	-		-
Total		3	5	3	-		

Pre-Year Study Plan^c Guide for a B.Eng. Degree in (Hydrogen Technology)

Pre-Year							
First Semester							
Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
GERL101B2	German I	3	5	9	-	F2F	-
CHEM103	General Chemistry	3	5	3	-	F2F	CHEM106 ^{co}
CHEM106	General Chemistry Lab	1	1	-	3	F2F	CHEM103 ^{co}
CS116	Computational Fundamentals	3	5	3	-	F2F	CS1160 ^{co}
CS1160	Computational Fundamentals Lab	1	1	-	3	F2F	CS116 ^{co}
MATH101	Calculus I	3	5	3	-	F2F	-
PHYS103	Physics I	3	5	3	-	F2F	-
Total		17	27	21	6		

Pre-Year							
Second Semester							
Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
GERL102B2	German II	3	5	9	-	F2F	GERL101B2
ENE211	Electrical Circuits I	3	5	3	-	F2F	MATH101, PHYS103, ENE213 ^{co}
ENE213	Electrical Circuits Lab	1	1	-	3	F2F	ENE211 ^{co}
PHYS104	Physics II	3	5	3	-	F2F	PHYS103, PHYS106 ^{co}
PHYS106	General Physics Lab	1	1	-	3	F2F	PHYS104 ^{co}
MATH102	Calculus II	3	5	3	-	F2F	MATH101
	"Probability and Statistics" or "Basics of Electrochemical Systems"	3	5	3	-	F2F	-
Total		17	21	21	6		

Pre-Year							
Summer Semester							
Course ID	Course Name	Credit Hours	ECTS	Contact Hours		Type	Prerequisites / Corequisites
				Lect.	Prac.		
GERL201B2	German III	3	5	6	-	F2F	GERL102B2, GEBC202B2 ^{co}
GEBC202B2	German IV	3	5	9	-	F2F	GEBC201B2 ^{co}
Total		6	10	15	-		

^cThe following study plan guide does not take into account possible remedial courses.