



Dipartimento di

Matematica, Informatica e Geoscienze

#### **BACHELOR DEGREE IN**

#### EARTH SCIENCES FOR SUSTAINABLE DEVELOPMENT

### CLASSE L-34

#### **STUDY PLAN**

#### For students enrolled in academic year 2025/26

The Bachelor Degree in Earth Sciences for Sustainable Development is organized in a single curriculum. Courses are classified as follows, according to the type of learning activity (Tipologia di Attività Formativa - TAF):

- A = Basic training activities
- B = Core discipline-specific activities
- C = Related and complementary activities
- D = Elective activities (student's choice)
- E = Final examination
- F = Other activities

Curriculum							
1 <sup>st</sup> year (60 CFU)							
Course	Module	Sector	TAF	CFU			
General Geology and Physical Geography	General Geology	GEO/02	С	3			
	Physical Geography	GEO/04	Α	6			
Fundamentals of Mathematics for Earth Sciences		MAT/07	А	9			
Fundamentals of Physics for Earth Sciences		FIS/01	Α	9			
Sedimentary Geology and Paleontology	Sedimentary Geology	GEO/02	A	6			
	Paleontology	GEO/01	Α	6			
Chemistry	General Chemistry	CHIM/03	Α	6			
	Organic Chemistry	CHIM/06	A	3			
Geochemistry of Planet Earth		GEO/08	В	6			
Mineralogy		GEO/06	Α	6			
2 <sup>nd</sup> year (60 CFU)							
Course	Module	Sector	TAF	CFU			
Petrography		GEO/07	В	6			
Structural Geology and Rock Mechanics		GEO/03	В	6			
Earth Surface Processes, Landforms and Climate Change	Applied Sedimentology	GEO/02	С	3			
	Geomorphology	GEO/04	В	6			
Geophysics	Institutions of Solid Earth Geophysics	GEO/10	В	6			
	Institutions of Exploration Geophysics	GEO/11	С	3			
Digital Geologic and Thematic Mapping	Principles of Geological Mapping	GEO/03	В	6			
	Geological Mapping of Substrate	GEO/02	С	3			
	Geological Mapping of Quaternary Deposits	GEO/04	С	3			
	Paleontology Applied to Geologic Mapping	GEO/01	С	3			
Engineering Geology and Applied Geophysics	Applied Geology	GEO/05	В	6			
	Applied Geophysics	GEO/11	С	3			
Introduction to Geologic Data Acquisition and Interpretation	Laboratory of Geodata Acquisition	GEO/08	С	3			
	Elements of Informatics for Geodata Analysis	INF/01	С	3			

Università degli Studi di Trieste

P. IVA: 00211830328

**Dipartimento di Matematica, Informatica e Geoscienze** Via E. Weiss, 2 I - 34128 Trieste CF: 80013890324

Tel. +39 040 558 2055 Fax. +39 040 558 2048 Email: segreteriadmg@units.it PEC: dmg@pec.units.it



# UNIVERSITÀ DEGLI STUDI DI TRIESTE

### Dipartimento di

## Matematica, Informatica e Geoscienze

III anno (60 CFU)							
Course	Module	Sector	TAF	CFU			
Georesources and Elements of Petrogenesis		GEO/09	В	6			
Hydrogeology and Management of Water Resources		GEO/05	В	6			
Geohazards and Sustainability		GEO/10	В	6			
Environmental Geochemistry and Mineralogy	Environmental Geochemistry	GEO/08	С	3			
	Applied Mineralogy	GEO/06	С	3			
Geological Surveying	Geophysics for Natural Resources	GEO/11	С	3			
	Geological Modeling	GEO/03	В	6			
	Prospecting for Georesources	GEO/02	С	3			
	Elements of Giacimentology	GEO/07	С	3			
Introduction to Data Science for Geoscience		INF/01	F	3			
Insegnamento a scelta			D	6			
Insegnamento a scelta			D	6			
Tirocinio			F	3			
Tesi di Laurea			E	3			

Università degli Studi di Trieste Dipartimento di Matematica, Informatica e Geoscienze Via E. Weiss, 2 I - 34128 Trieste CF: 80013890324 P. IVA: 00211830328

Tel. +39 040 558 2055 Fax. +39 040 558 2048 Email: segreteriadmg@units.it PEC: dmg@pec.units.it



## UNIVERSITÀ DEGLI STUDI DI TRIESTE

#### Dipartimento di

Matematica, Informatica e Geoscienze

#### PREREQUISITES

It is strongly recommended to follow the sequence of exams as outlined in the semester-based study plan. Specifically:

General Geology and Physical Geography precedes Earth Surface Processes, Landforms and Climate Change;

The General Chemistry module of the Chemistry course precedes Geochemistry of Planet Earth and Mineralogy;

Mineralogy precedes Petrography;

Structural Geology and Rock Mechanics precedes Digital Geologic and Thematic Mapping;

Sedimentary Geology and Paleontology precedes Digital Geologic and Thematic Mapping;

Digital Geologic and Thematic Mapping precedes Geological Surveying;

Fundamentals of Physics for Earth Sciences precedes Geophysics.

#### **ASSESSMENT METHODS**

Learning assessment will be conducted through proficiency exams, which may include practical, written, and oral tests. Additionally, evaluation will take place during internships and the final thesis. These assessments will verify not only the acquisition of fundamental knowledge but also the ability to exercise independent judgment, engage in critical and independent discussion of topics covered during the program, communicate effectively, both orally and in writing, through technical reports and scientific papers, and demonstrate the capability of independent in-depth study of acquired knowledge and skills.