



TECHNICAL UNIVERSITY OF VARNA



**INFORMATION FOR INCOMING
STUDENTS GUIDEBOOK**

ERASMUS+



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DEAR STUDENTS,

In this guide, you will find some practical and useful information about our university and daily life in Varna. It has prepared for you by the International Cooperation Department, in Technical University of Varna, to make your stay here pleasant, satisfying and most enjoyable.



Erasmus+





BULGARIAN IN BRIEF

Territory: 110993.6 km²

Population: 6,519,789 (2021)

Capital: Sofia

Official language: Bulgarian

National currency: Bulgarian Lev (BGN)

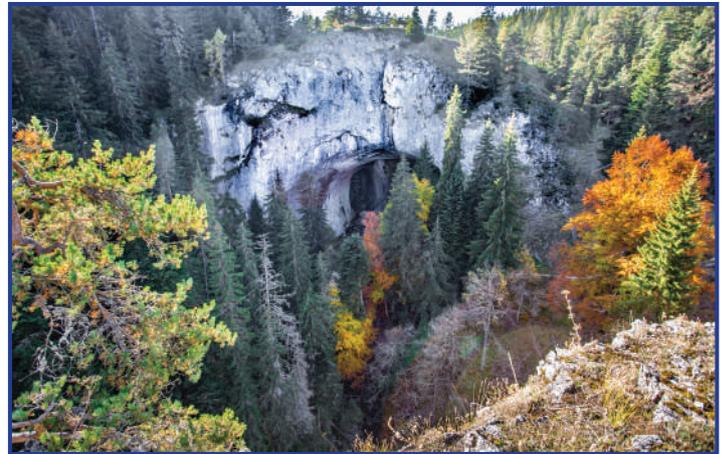
Time zone: GMT+2

GENERAL INFORMATION

Bulgaria is situated in the south – east part of Europe, in the eastern part of the Balkan Peninsula. For centuries, the roads passing through the territory of the country have been connecting Europe with Asia and Africa. Four common European transport corridors, connecting West and North Europe with the eastern and southern part of the continent their roads here.

Apart from its being situated on crossroads, Bulgaria is also known for its nature. In spite of its relatively small territory, the country has varied landscape. The scenery changes subsequently from vast plants, to hilly areas and high mountains. Large beaches and beautiful rocky shores stretch out along the Black Sea coast. The climate is moderately continental with four distinct seasons. The average annual air temperature is 10.5° C, with average January temperatures around 0° C, and the summer temperatures rarely exceeding 30° C.

Bulgaria is one of the oldest European countries with a 13 century-old tradition.



Sea Capital of Bulgaria



VARNA

The city of Varna, often called the Sea Capital of Bulgaria, is the third largest town in the country, with a population of 335 177 people registered as citizen (2017).

Varna is situated on the West cost of the Black Sea. It is a major port, an important commercial, industrial, tourist, transport, university and cultural centre. The climate of Varna is unique. Winters are mild with temperatures rarely below zero degrees. Summer temperatures are around 30°C.





The present town of Varna was built over one of the oldest settlements in the world (VI century B.C.), which in turn, was established by a civilization preceding every known tribe or nation.

The Greek established the colony of Odessos there about 580 B.C. Later, under the Romans and their successors, the Slavs, Varna became a major port trading with Constantinople, Venice and Dubrovnik.

Varna Historical Museum features the oldest gold treasure in the world, which was found in an ancient necropolis near Varna. It also unique collections of icons, carved wood, pictures and sculptures from various historical period.

Among the sights of Varna are the Roman thermal baths (II nd century B.C.) the Cathedral, built in the end of the XIX century the Theatres baroque building' the cave monastery in the Aladza Monastery area, dating back to medieval times, the old clock tower, ect.



Along the coast there are the Sea Gardens of Varna. It is nice place for sports and recreation. Here you can find the only dolphinarium and aquarium in the country. There is also planetarium, a vivarium, a zoo, an open-air swimming pool and tennis courts.

Along the alley, which runs parallel to the coastline, there are a number of small cafes and restaurants, offering seafood specials. The beach is only 10 minutes walk from the centre of Varna. St. Konstantin and Helen and the Golden Sands resorts, famous all over the world, are within a short distance.

In summer Varna hosts annual musical, theatre and cinema festivals and ballet competition.

There are numerous visiting performers and bands from the country and abroad. During the traditional Week of the Sea (in August), various competitions and exhibitions are held. In the Palace of Culture and Sport and the Festival and Congress Centre many sports competitions, international forums, congresses and fairs take place every year.

TRANSPORT

The town of Varna is a major transport centre in Bulgaria. Varna's international airport has daily scheduled flights to Vienna, Budapest, London, and Sofia – the capital of Bulgaria. During the summer, there are flights to all main airports in Europe





DEADLINES FOR SENDING APPLICATIONS FOR BOTH SEMESTERS:

Winter semester: 30th June

Summer semester: 30th November

AVAILABLE COURSES IN ENGLISH

(Bachelor Degree ONLY)

1. Navigation
2. Marine Engineering
3. Naval Architecture and Marine Technology
4. Software and Internet Technologies
5. Electronics
6. Renewable Energy Sources
7. Industrial Management
8. Agronomy

BEFORE MOBILITY

Mobility students who would like to study at TU–Varna in the winter semester or for a full academic year should submit their application forms on Erasmus office email: erasmus@tu-varna.bg until 30th June (after the nomination period). Those who would like to study in the summer semester should submit their application forms until 30th November (after the nomination period).

Check for agreements between your home university and the TU–Varna by contacting your International Relations Office. The person in charge will inform you about the procedures to be selected as an Erasmus+ mobility student.

After passing the selection procedures, your home university must nominate you in our online application system. Applications should be sent by 30th June for winter semester and full academic year, and by 30th November for summer semester.

List of requested documents:

- Application Form
- Learning Agreement
- Housing Application (where applicable)
- Copy of passport/ID card
- 4 passport-size photos (3.5 x 4.5 cm)

All completed documents must be first sent to erasmus@tu-varna.bg for checking and then, if approved, via post, along with the photos, to TU–Varna International Cooperation Department.

GET A VISA

Visa regulations for tourists are liberal: Bulgaria has agreements with numerous countries for allowing visitors to stay in the country without a visa for up to 90 days. Exchange students from EU countries do not need a visa. Exchange students from non-EU countries must obtain visa D in order to study at TU–Varna

DURING THE MOBILITY



Introductory days: During your first week, you will get an in-depth review of studies, accommodation, facilities, tutoring, trips arranged for international students, etc. Presence during Welcome Days is mandatory. Contact with the academic coordinator about all academic matters!

Selecting courses: You can find the courses offered in English for the incoming Erasmus+ students on page 16 of this guide.

Tutoring: Mobility students can take advantage of their lecturers' tutoring hours upon request. Group meetings for mobility students are also an option.

ISIC card

We advise you to bring your ISIC card. The card is recognized in Bulgaria and can be helpful when purchasing international train tickets, plane tickets or visiting museums. With your ISIC card, you can also get special discounts at different shops and clubs.

Health Insurance



Foreign students, who are citizens of EU and EEA member states, need to have an European Healthcare Insurance card (forms E128, E111 or the E-card). The document type depends on the authorized insurance agency of the country of origin. Presentation of the EHIC guarantees you reimbursement of the medical cost on the spot, or soon after, you return home. Students

who are citizens of non-EU member states should arrange a health insurance certificate with the authority responsible for health affairs in their home country.

This certificate should contain a clear description of the scope of their rights. Students have to take a health insurance certificate prior to their arrival in Bulgaria.



AT THE END OF MOBILITY

The Erasmus Office will release a Certificate of Attendance for the mobility period.

The Transcript of Records will be issued both in Bulgarian and in English, no later than 4 weeks after the assessment period. The Erasmus Office will send a scanned copy by email to you and your home university and will also post the original document to your university.

TECHNICAL UNIVERSITY OF VARNA



The Technical University of Varna was founded in 1962 by a Decree of the Council of Ministers of the People's Republic of Bulgaria and Act of the National Assembly.

The University is located at an area of 200 decares. The compact location of the University, the hostels and the canteens create convenient conditions for living and studying for the students.

TU-Varna is a member of the European University Association and it is the first Bulgarian university accredited by EUA.

TU - Varna is an autonomous institution

incorporating 4 faculties with 22 departments, 2 colleges and Department of Mathematics and Foreign Languages:

- Faculty of Computing and Automation
- Faculty of Electrical Engineering
- Faculty of Shipbuilding
- Faculty of Mechanical Engineering And Technologies
- Business Relation Center
- University library
- Student hostels etc.



SPORTS COMPLEX

- Basketball playground
- Beach volleyball playgrounds
- Two basketball and volleyball playgrounds, paved with an asphalt covering
- Two tennis courts, paved with an asphalt covering
- Fitness hall
- Multifunctional sports hall 70 x 30 m, paved with artificial tarquet, EU certified for 9 types of sport games. This hall had been totally renovated to support the requirements for due training and organization of official sports events



- Table tennis hall
- Kick-box hall, furnished with all necessary needed equipment
- Hall, fit for dancing and aerobics
- Chess-games hall

ACCOMMODATION

Technical University of Varna provides accommodation with regards to Erasmus students financial means. For those who prefer accommodation in students' halls of residence double rooms are offered, each with its own bathroom.



FOOD

The student's canteen offers cooked meals at low prices. There are small restaurants and cafeterias as well as fast food places.



STUDENT COUNCIL OF TU-VARNA

The Students Council is a student body, which defends the students and PhD students rights and facilitates their studies and their extracurricular activities.

The Students Council organizes and provides assistance in holding part of the following activities and events:

- Scientific Forums
- Students Scientific Conference
- Days of Robotics
- Programming Olympiad
- Chess Tournament
- Other events
- Sports Tournaments
- Football
- Volleyball
- Table Tennis
- Darts
- Strongman
- Parties
- Evening of the Faculties of TU-Varna
- Welcome parties
- Halloween parties
- Christmas parties



STUDENT CLUBS AT TU-VARNA

- Coffee, Science and Something More...
- Renewable energy sources (RES)
- Robotics and Mechatronics
- Student Auto Club
- Student Marine Club
- „Creative Code”
- TU-Varna Motorsport
- EcoLogically
- Olympic Student Club
- Student club „TU-Play”
- TU on AIR
- Design Student Club
- IT++ TU



STUDY PROGRAMME FOR EXCHANGE STUDENTS

WINTER SEMESTER 2023/2024

NAVIGATION

Subjects from 1-st semester	ECTS	Subjects from 3-rd semester	ECTS
1. Mathematics, part 1	6	14. Collision Regulations, part 1	5
2. Computer Science and Computer Technology	6	15. Technical Aids to Navigation	5
3. Technical Documentation	6	16. Pilotage and Hydrography	5
4. English Language – specialized, part 1 (NAVG)	6	17. Meteorology and Oceanography	5
5. Natural Science	6	18. Statistics	5
		19. English Language – specialized, part 3 (NAVG)	5
Subjects from 5-th semester	ECTS	Subjects from 7-th semester	ECTS
27. Accuracy of Navigational Observations	6	38. Passage Planning	5
28. Ship's Operation and Cargo Handling – part 1	6	39. Electronic Navigation Aids	5
29. Ship Power Plants	6	40. Communications at Sea	5
30. Bridge Equipment and Ship Systems	6	41. Radar Watch and Plotting	5
31. English Language – specialized, part 5 (NAVG)	6	42. Ship's Handling and Bridge Team Management	6
		43. English Language – specialized, part 7 (NAVG)	5

MARINE ENGINEERING

Subjects from 3-rd semester	ECTS	Subjects from 5-th semester	ECTS
14. Thermodynamics and Heat Transfer	7	29. Marine Diesel Engines, part 1	5
15. Fluid Mechanics	4	30. Electrical Equipment of Ships	6
16. Strength of Materials	5	31. Marine Auxiliary Machinery, part 2	6

17. Electrical Engineering and Electronics, part 2	5	32. Marine Boilers	5
18. Computer Aided Design	3	33. Maritime Law	3
19. English Language, part 3 (ME)	2	34. English Language – specialized, part 2 (ME)	2

NAVAL ARCHITECTURE AND MARINE TECHNOLOGY

Subjects from 3-rd semester	ECTS	Subjects from 5-th semester	ECTS
15. Fluid Mechanics	4	29. Ship Systems and structure	6
16. Strength of Materials	7	30. Structure and Strength of Ships, part 1	5
17. Computer Science and Computer Technology	6	31. Strength of Ships and Propulsors	4
18. Graphical Documentation in Naval Architecture	7	32. Strength of Ships and Propulsors, project	4
19. English, part 3 (NAMT)	2	33. Welding of Marine Structures	4
		34. English -specialized, part 1 (NAMT)	2
		35. Team Management	2

SOFTWARE AND INTERNET TECHNOLOGIES

Subjects from 1-st semester	ECTS	Subjects from 3-rd semester	ECTS
1. Mathematics, part 1	7	12. Discrete Structures	6
2. Web Design	7	13. Data Bases	6
3. Programming Fundamentals	8	14. Object-Oriented Programming, part 1	7
4. Electronics	7	15. Computer Organization	6
		16. System Analysis	6
Subjects from 5-th semester	ECTS	Subjects from 7-th semester	ECTS
26. Operating Systems Principles	6	39. Network Administration	6
27. Software Requirements and Specifications	5	40. Language Processors	6
28. Databases Programming	6	41. Artificial Intelligence	6
29. Computer Networks and Internet	6	42. Programming for Mobile Internet Devices	6

30. Software Production Technology	6	43. Internet Information Retrieval	6
31. Object Oriented Programming, part 2	2		

ELECTRONICS

Subjects from 7-th semester	ECTS		
41. Digital Signal Processing	6		
42. Sensors and Signal Conditioning	6		
43. Industrial Electronics	6		
44. Automotive Electronics	6		
45. Microelectronics	6		
46. Power Electronic Converters, project	2		

RENEWABLE ENERGY SOURCES

Subjects from 5-th semester	ECTS		
32. Special Course of Renewable Energy Sources	4		
33. Hydrokinetic and Cogeneration Systems	5		
34. Photovoltaic Facilities and Solar Power Plants	6		
35. Electrical Machines, part 1	7		
36. Electrical Apparatus, part 1	7		
37. Transformative Technique	6		

INDUSTRIAL MANAGEMENT

Subjects from 3-rd semester	ECTS		
14. Computer Science and Computer Technology	7		
15. Accounting of the Enterprise	6		
16. Marketing	7		
17. Business Communications and Public Relations	5		

18. Commercial Law	4	
19. Base of Automation	4	

AGRONOMY

Subjects from 3-rd semester	ECTS	Subjects from 7-th semester	ECTS
14. Economics	4	45. Plant Protection, part 4 (Integrated Pest Management)	6
15. Agrochemistry	6	46. Agricultural Meliorations	6
16. Genetics and Biotechnologies	6	47. Development of Agro-technologies for Field Crops Production	6
17. Design of Field Experiments	5	48. Quality Assessment and Grain Storage	6
18. Ecology	4	49. Precise Agriculture	6
19. Technologies for Restoration of Damaged Soils	4		

SUMMER SEMESTER 2023/2024

NAVIGATION

Subjects from 2-st semester	ECTS	Subjects from 4-rd semester	ECTS
7. Material Science and Technology	5	21. Collision Regulations, part 2	6
8. Mathematics, part 2	6	22. Methods and Means for Environmental Protection during Ship's Operations	6
9. Seamanship	6	23. Basics of Navigation	6
10. Technical Mechanics	4	24. Ship Theory	6
11. Electrical Engineering and Electronics	4	25. English Language – specialized, part 4 (NAVG)	6
12. English Language – specialized, part 2 (NAVG)	6		
Subjects from 6-th semester	ECTS	Subjects from 8-th semester	ECTS
32. Astronavigation	6	44. Shipboard Damage Control	5

33. Ship Commercial Operation	5	45. International Maritime Conventions. Ship Documents	6
34. Theory of Manoeuvring	5	46. Safety of Navigation. SAR	5
35. Ship's Operation and Cargo Handling, part 2	5	47. English Simulator in Emergencies	4
36. Visual and Technical Methods for Determining Ship's Position	5	48. English Language – specialized, part 8 (NAVG)	5
37. English Language – specialized, part 6 (NAVG)	5		
32. Astronavigation	6		

MARINE ENGINEERING

Subjects from 2-rd semester	ECTS	Subjects from 6-th semester	ECTS
22. Machine Elements	6	Automatic Control of Ship Power Systems	6
23. Theory of Mechanisms and Machines	4	Marine Steam and Gas Turbines	6
24. Ship Theory and General Arrangements	8	Marine Diesel Engines, part 2	5
25. Marine Auxiliary Machinery, part 1	6	Marine Diesel Engines, project	3
26. English Language – specialized, part 1	2	Technical Safety and Control of Environmental Effects	5
		English Language – specialized, part 3	2

NAVAL ARCHITECTURE AND MARINE TECHNOLOGY

Subjects from 4-rd semester	ECTS	Subjects from 6-th semester	ECTS
22. Thermodynamics and Heat Transfer	5	37. Architecture of Ships and Yachts	6
23. Machine Elements	6	38. Statics and Dynamics of Ship, part 2	6
24. Ship Hydrodynamics	5	39. Structure and Strength of Ships, part 2	6
25. Classification Norms and Documentation	6	40. Structure and Strength of Ships, project	4
26. Statics and Dynamics of Ship, part 1	6	41. Technical Safety and Control of Environmental Effects	4
27. English, part 4 (NAMT)	2	42. English Language – specialized, part 2 (NAMT)	2

SOFTWARE AND INTERNET TECHNOLOGIES

Subjects from 2-st semester	ECTS	Subjects from 4-rd semester	ECTS
6. Mathematics, part 2	9	18. Object Oriented Programming, part 2	6
7. Algorithms and Data Structures	9	19. Web Design	6
8. Digital Logic	8	20. Microprocessors	5
9. Foreign Language (SIT)	3	21. Programming Systems	5
		22. Graphic Systems	6
Subjects from 6-th semester	ECTS	Subjects from 8-th semester	ECTS
32. System Programming	6	47. Office Technologies	7
33. Internet Servers and Services	5	48. E-commerce	7
34. Software Projects Management	5	49. Optional Subject	7
35. User Interface Design	5		
36. Internet Technologies	6		
37. Software Production Technology, project	2		

ELECTRONICS

Subjects from 4-th semester	ECTS		
47. Medical Electronic Equipment	7		
48. Smart Electronic Systems	7		
49. Electronic Systems for Renewable Energy Sources	7		

RENEWABLE ENERGY SOURCES

Subjects from 8-th semester	ECTS		
38. Electrical Machines, part 2	7		
39. Electrical Apparatus, part 2	7		
40. Technical Safety	4		
41. Heating Installations with Renewable Energy Sources	6		

42. Relay Protection	5		
43. Optional Subject	5		

INDUSTRIAL MANAGEMENT

Subjects from 4-rd semester	ECTS		
21. Strategic Management	6		
22. Fundamentals of Finance	7		
23. Human Resources Management	5		
24. Intellectual Property Rights	5		
25. Production Technologies, part 1 (Technologies in Mechanical Engineering)	7		

AGRONOMY

Subjects from 3-rd semester	ECTS	Subjects from 7-th semester	ECTS
21. Plant Protection, part 1 (Herbology)	6	50. Organic Farming and Agroecology	6
22. Plant Protection, part 2 (Phytopathology)	6	51. Phytopharmacy	5
23. Breeding and Seed Production of Cultivated Plants	6	52. European Programs in the Agrarian Sector	3
24. Viticulture, part 1	5		
25. Agricultural Machinery	5		
26. Conservation of Natural Resources	4		



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