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# Položaj i tradicija

Tradicija visokog školstva u gradu Rijeci postoji još od 1627. godine. Sustavno školovanje tehničkih kadrova na ovom području počinje odlukom o premještaju Carsko-kraljevske Mornaričke akademije iz Trsta u Rijeku 1854. godine. Tom je odlukom uveden redoviti četverogodišnji studij sa sadržajima izobrazbe iz područja gradnje čeličnih brodova i parnih strojeva za potrebe tadašnje austrijske vojske, koji se održavao sve do razdoblja iza I. svjetskog rata. Temelji Tehničkog fakulteta su i tehnička postignuća u našem gradu i okolici poput izuma torpeda 1866. godine, prvih svjetskih snimki puščanog metka u letu 1886. godine, rođenja i prvih znanstvenih postignuća svjetski poznatog seizmologa i meteorologa Andrije Mohorovičića, te razvoja nekih od ključnih elementa u brodograđevnoj i strojarskoj industriji, kao i u energetici.

# Position and tradition

The tradition of higher education in Rijeka dates back as far as 1627, whereas the first milestone of the systematic education of engineering personnel in this area is laid by the displacement of the Navy Academy from Trieste to Rijeka in 1854. In this way, a full-time four-year study with educational courses from the fields of steel ship and steam engine construction was commenced for the needs of the Austrian Navv of that period, and it continued until after World War I. Additionally, initial foundations of the Faculty of Engineering were laid on engineering achievements like torpedo manufacturing in 1866, the first world photography of rifle bullets at supersonic speed in 1886, the birth and the first scientific achievements of the worldly renowned seismologist and meteorologist Andrija Mohorovičić, as well as the development of some of the crucial elements in naval architecture, mechanical engineering and power industry both in the city of Rijeka and broader region.





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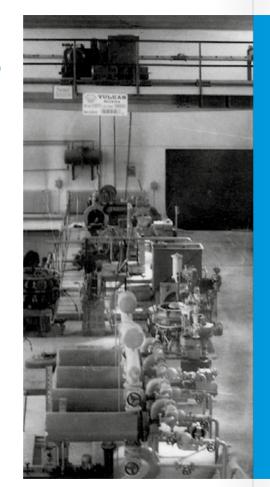
Tehnički fakultet | Faculty of Engineering | 5

## Povijest Tehničkog fakulteta

Fakultet je osnovan 1960. godine pod imenom Strojarski fakultet te u prvo vrijeme školuje diplomirane inženjera strojarstva. Fakultet od šk. god. 1969./70. školuje i diplomirane inženjere brodogradnje te mijenja ime u Strojarskobrodograđevni fakultet. Pod ovim imenom djeluje do 1973. godine kada je preimenovan u Tehnički fakultet. Fakultet je šk. god. 1971./72. započeo s izvođenjem nastave na studiju građevinarstva, koji se 1976. godine osnivanjem Građevinskog fakulteta odvaja u samostalnu organizaciju. Na Fakultetu je 1987. g. započela nastava na studiju elektrotehnike, a 2008. g. na studiju računarstva.

# History of the Faculty of Engineering

The Faculty was established in the year of 1960. previously named Strojarski fakultet (Faculty of mechanical engineering). At the very early stages, only graduate engineers of Mechanical Engineering were educated, and since the Faculty started recruiting graduate engineers of naval architecture in 1969/70, it was then renamed into the Faculty of Mechanical Engineering and Naval Architecture. Under this name it pursued its activities until 1973, when it was renamed into the Faculty of Engineering. The initiation of the study for graduate Civil Engineering in 1971/72 resulted in the foundation of the independent Faculty of Civil Engineering in 1976. Education in the field of electrical engineering started in 1987, and in the field of computing in 2008.





djelatnost 11 zavoda. U sklopu zavoda dieluje 38 katedri i 50 laboratorija, a na Fakultetu djeluju te Financijska služba, Služba nabave i komercijale. Služba općih i kadrovskih poslova, Služba studentske evidencije i Tehnička



The Faculty encompasses 11 departments.The departments include 38 sections and 50 laboratories, and the Faculty also as well as an Accounting Division, Procurement Office, the General and Personnel Office, the Student Affairs Office and the Building





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# Misija i vizija

Tehnički fakultet Sveučilišta u Rijeci provodi znanstvena, razvojna i stručna istraživanja. posebice programe od strateškog interesa za regiju u kojoj djeluje i za Republiku Hrvatsku u cjelini, te na njima utemeljeno preddiplomsko, diplomsko i poslijediplomsko obrazovanje. Tehnički fakultet pri tome aktivno surađuje s akademskim (znanstvenim i visokoobrazovnim) i gospodarskim partnerima u domovini i inozemstvu. Fakultet osigurava mogućnost unutarnje i vanjske mobilnosti svojih studenata i nastavnika, racionalno korištenje ljudskih i materijalnih resursa, razvoj multidisciplinarnih znanstveno-nastavnih djelatnosti te nadzor i stalni rast kvalitete. konkurentnosti i međunarodne kompetitivnosti nastavnog, znanstvenog i stručnog rada.

Tehnički fakultet Sveučilišta u Rijeci je znanstveni i istraživački centar izvrsnosti na području tehničkih znanosti, s jasnim istraživačkim profilom usmjerenim na održivi razvoj, koji provodi kvalitetno i učinkovito obrazovanje temeljeno na ishodima učenja i koncepciji cjeloživotnog obrazovanja.

# Mission and vision

The Faculty of Engineering of the University of Riieka conducts scientific, developmental and professional research, especially programs of strategic interest for the region in which it operates for the Republic of Croatia as a whole, through undergraduate, graduate and postgraduate education. The Faculty cooperates actively with academic (scientific and higher education) and economic partners at home and abroad. The Faculty provides opportunities for internal and external mobility of it's students and teachers, the rational use of human and material resources, the development of multidisciplinary scientific-teaching activities, and the supervision and continuous growth of quality, comparability and international competitiveness of teaching, scientific and professional work.

The Faculty of Engineering of the University of Rijeka is a scientific and research center of excellence in the field of technical sciences, with a clear research profile focused on sustainable development, which conducts quality and efficient education based on the learning outcomes and the concept of lifelong learning.



Aktivnom suradnjom s
gospodarstvom, partnerstvima za
razvoj zajednice, samostalnom i
posrednom (preko Sveučilišta u Rijeci)
uključenošću u Europski istraživački
prostor i Europski prostor visokog
obrazovanja, te najvišom razinom
organiziranosti i odgovornosti,
Tehnički fakultet pokazuje svoju javnu
odgovornost i pridonosi tranziciji u
društvo znanja. Tehnički fakultet je
dinamična institucija koja sustavno
i organizirano potiče mobilnost i
razvijanje istraživačkih karijera,
te omogućuje izražavanje talenta
i poduzetničke energije svakoga
pojedinca (nastavnika, asistenta,
studenta i administratora).

Through active co-operation with the economy, community development partnerships, independent and indirect (through the University of Rijeka) through involvement in the European Research Area as well as European Higher Education Area and at the highest level of organization and accountability, the Faculty demonstrates its public accountability and contribute to the transition to the knowledge society. The Faculty of Engineering is a dynamic institution that systematically and organizationally encourages mobility and development of research careers and enables the expression of talent and entrepreneurial energy of each individual (teachers, assistants, students and administrators).

#### Studenti

Do sada je na Tehničkom fakultetu u Rijeci diplome steklo 136 doktora znanosti, 95 magistara znanosti, 2899 diplomiranih inženjera (od čega 2335 strojarstva, 311 brodogradnje i 253 elektrotehnike), 1536 inženjera (od čega 717 strojarstva, 108 brodogradnje i 711 elektrotehnike), 936 magistra inženjera (od čega 394 strojarstva, 89 brodogradnje, 365 elektrotehnike i 88 računarstva), 1289 sveučilišnih prvostupnika inženjera (od čega 600 strojarstva, 93 brodogradnje, 412 elektrotehnike i 184 računarstva) te 415 stručnih prvostupnika inženjera (od čega 151 strojarstva, 41 brodogradnje i 223 elektrotehnike). Danas na Fakultetu studira više od 2260 studenata.

#### Students

So far, the Faculty of Engineering in Rijeka has delivered 136 Doctor of Science and 95 Master of Science degrees. Of the former 2899 Graduate Engineer Diplomas, 2335 were in Mechanical Engineering, 311 in Naval Architecture and 253 in Electrical Engineering; and of 1536 Engineer Diplomas 717 were in Mechanical Engineering, 108 in Naval Architecture and 711 in Electrical Engineering. The Bologna programme has produced 936 Master Engineers (394 Mechanical Engineering, 89 Naval Architecture, 365 Electrical Engineering and 88 Computer Engineering), 1289 University Bachelor Engineers (600 Mechanical Engineering, 93 Naval Architecture, 412 Electrical Engineering and 184 Computer Engineering) as well as 415 Vocational Bachelor Engineers (151 Mechanical Engineering, 41 Naval Architecture and 223 Electrical Engineering). At present more than 2260 students study at the Faculty.



136

95

magistara znanosti

Masters of Sciences

1536

inženiera

Engineers

1289

sveučilišnih prvostupnika inženjera

University Bachelor Engineers

#### Zaposleni

Na Fakultetu djeluju Zavod za automatiku i elektroniku, Zavod za brodogradnju i inženjerstvo morske tehnologije, Zavod za elektroenergetiku, Zavod za industrijsko inženjerstvo i management, Zavod za konstruiranje u strojarstvu, Zavod za matematiku, fiziku, strane jezike i kineziologiju, Zavod za materijale, Zavod za mehaniku fluida i računarsko inženjerstvo, Zavod za računarstvo, Zavod za tehničku mehaniku te Zavod za termodinamiku i energetiku koji objedinjuju ukupno 38 katedri i 50 laboratorija.

Potporu u radu nastavnicima i studentima pružaju i ustrojeni Računalni centar, Knjižnica te administrativno-tehničke službe Fakulteta

#### Employees

The Faculty houses eleven departments:
Department of Automation and Electronics,
Department of Naval Architecture and
Ocean Engineering, Department of Electrical
Power Engineering, Department of Industrial
Engineering and Management, Department of
Mechanical Engineering Design, Department of
Mathematics, Physics, Foreign Languages and
Kinesiology, Department of Materials Science
and Engineering, Department of Fluid Mechanics
and Computational Engineering, Department of
Computer Engineering, Department of Engineering
Mechanics, Department of Thermodynamics
and Energy Engineering, which encompass 38
sertions and 50 Inhorotories

The support in education and research is provided through Computing Centre and Library, as well as administrative and technical services of the Faculty.

zavoda

departments

38

katedri

50

laboratoriia

178

zaposlenika employees

40

administrativne i stručnie službe administrative and professional services

5

zaposlenika izvan sustava MZO employees funded by sources other than government Od 178 zaposlenika, 77 ih je u znanstvenonastavnim, 8 u nastavnim i 33 u suradničkim zvanjima, 8 je znanstvenih novaka, 7 su zaposlenici na projektima Hrvatske zaklade za znanost, a 40 je djelatnika u administrativnim i stručnim službama. Petoro je zaposlenika izvan sustava MZO (1 u suradničkom zvanju/ nastavno osoblje i 4 zaposlenika u stručnim službama). Na Fakultetu radi i veći broj vanjskih suradnika.

Of the total number of 178 employees, 77 are in teaching-research, 8 in teaching and 33 in associate positions, 8 junior researchers, 7 members of staff work on projects funded by the Croatian Science Foundation, and 40 work in the administrative and professional services. Five employees are outside of the system of the Ministry of Science, Education and Sports. The Faculty engages a large number of external associates as well.

### Studiji

Studijski programi koji se izvode na Fakultetu rezultat su tradicionalnih, ali i novih znanstvenih dostignuća u znanstvenim poljima strojarstva, brodogradnje, elektrotehnike i računarstva te srodnim tehničkim poljima. U više su navrata inovirani i prilagođavani potrebama gospodarstva. Uz obavezne predmete, studijski programi sadrže i velik broj izbornih predmeta, čime se postiže njihova prilagodljivost individualnim potrebama i željama studenata. Radi konkurentnosti, studijski programi kontinuirano se inoviraju.

## Study programs

The study programs performed at the Faculty are the result of traditional and new scientific achievements in the fields of mechanical engineering, naval architecture, electrical engineering and computer engineering as well as related engineering fields. They have been repeatedly innovated and adjusted to the needs of the economy. In addition to compulsory subjects, the study programs contain a large number of elective courses, thus satisfying the individual needs and desires of the students. The continuous innovation of study programs is provided in order to maintain students competitiveness.

Struktura studija

Structure of studies



111

RAČUNARSTVO Computing

STROJARSTVO

Mechanical

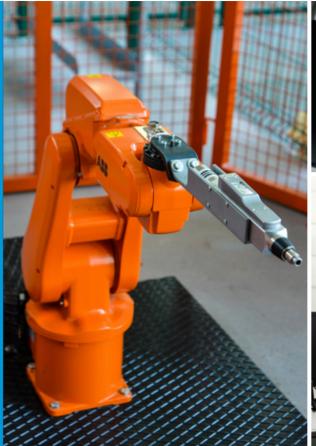


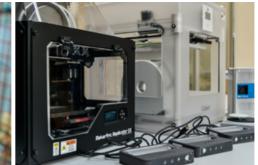
BRODOGRADNJA

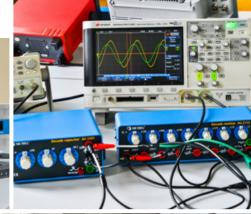
Architecture



**ELEKTROTEHNIKA** Electrical





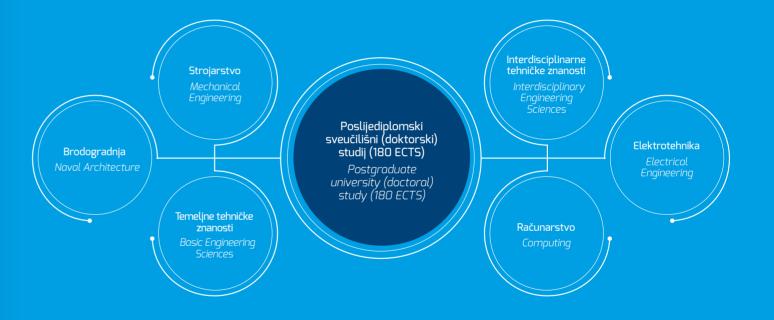




#### Struktura studija

Study programs





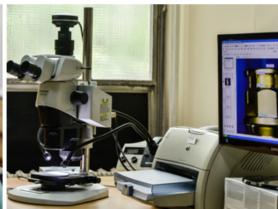
#### **Znanost**

Naši se studiji inženjerstva odvijaju u istraživačkom okruženju; nastavnici koji drže predavanja i vježbe sudjeluju u istraživanjima unutar širokog raspona tehničkih znanosti (strojarstvo, brodogradnja, elektrotehnika, računarstvo, temeljne tehničke znanosti i interdisciplinarne tehničke znanosti). Studenti preddiplomskih, diplomskih i poslijediplomskih studija imaju priliku usko surađivati s istraživačima različitih akademskih i profesionalnih pozadina na uzbudljivim istraživačkim i razvojnim projektima.

#### Science

Our engineering studies take place in a research environment; teachers who hold lectures and exercises participate in research within a wide range of technical sciences (Mechanical Engineering, Naval Architecture, Electrical Engineering, Computing, Basics Engineering Sciences, Other Interdisciplinary Engineering Sciences). Students of undergraduate, graduate and postgraduate studies have the opportunity to collaborate closely with researchers of various academic and professional backgrounds in exciting research and development projects.









Na Tehničkom fakultetu se odvija znanstvenoistraživački rad u okviru znanstvenih projekta.

Riječ je o projektima Hrvatske zaklade za znanost, EU projektima, projektima financiranim od strane Sveučilišta u Rijeci, bilateralnim projektima, te istraživačkim projektima s gospodarstvom.

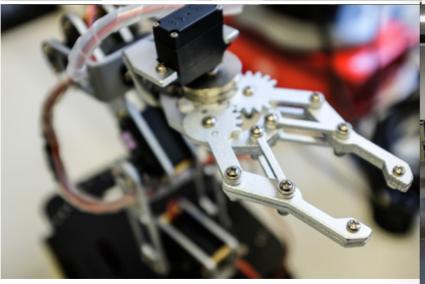
The Faculty of Engineering is carrying out scientific research work within the framework of scientific projects.

These are projects funded by Science Foundation, EU projects, University of Rijeka research grants, bilateral projects, and Research projects in cooperation with industry.











## Laboratoriji

U sklopu zavoda na Fakultetu djeluje i 50 laboratorija, koji omogućavaju visoku kvalitetu znanstvenog i nastavnog rada na Fakultetu.

Fakultet kontinuirano ulaže u nabavu kako nastavne, tako i istraživačke laboratorijske opreme.

#### Laboratories

Faculty's departments include 50 laboratories, which make possible high quality of scientific and educational work at the Faculty.

The Faculty continuously invests in the procurement of teaching materials and research laboratory equipment.

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#### Društveni život i aktivnosti

#### Studentski timovi

Studenti Tehničkog fakulteta djeluju i kroz više studentskih timova.

Riteh Racing Team je Formula Student tim Tehničkog fakulteta Sveučilišta u Rijeci osnovan krajem 2007. godine. Sveučilište u Rijeci je prepoznalo projekt Riteh Racing Teama kao projekt od iznimne važnosti za Sveučilište, grad i regiju budući da predstavlja Hrvatsku kao državu perspektivnih budućih inženjera na svjetskim Formula Student natjecanjima.

Jedan od tih timova je RITEH WATERBIKE TEAM koji predstavlja grupu studenata entuzijasta brodogradnje i inženjerstva na Tehničkom fakultetu u Rijeci. Tim je osnovan 1999. godine s ciljem da se natječe i razmjenjuje vještine i znanja o IWR (International Waterbike Regatta) s vodenom biciklom koju su konstruirali i izgradili sami studenti.

# Social life and activities

#### Student's teams

The students of the Faculty are involved in several student groups.

Riteh Racing Team is the Formula Student Team of the Faculty of Engineering, University of Rijeka, founded in year 2007. The University of Rijeka has recognized the project Riteh Racing Teama as a project of outstanding importance for the Faculty, the city of Rijeka and the region as it represents Croatia as a country of prospective future engineers at the world Formula Student competitions.

RITEH WATERBIKE TEAM is a group of enthusiastic students of naval architecture and engineering from Faculty of Engineering in Rijeka. The team was founded in 1999 with a goal to compete and also exchange skills and knowledge on the IWR (International Waterbike Regatta) with waterbike constructed and made by students.



Adria Hydrofoil Team čini skupina studenata Tehničkog i Pomorskog fakulteta, te ostalih sastavnica Sveučilišta u Rijeci. Projekt je pokrenut u listopadu 2015. godine na inicijativu dijela studenata iz RITEH Waterbike Team-a. AHT se bavi projektiranjem i izradom hidrokrilnih plovila za međunarodno natjecanje inovacija HydroContest koje se odžava svake godine na drugoj lokaciji u Europi.

Members of Adria Hydrofoil Team are students from the Technical and Maritime Faculties and other components of the University of Rijeka. The project was launched in October 2015 at the initiative of students already a part of the RITEH Waterbike Team. AHT is involved in the design and manufacture of hydrofoil vessels for the international innovation competition HydroContest, which takes place every year at another location in Europe.

#### Studentski zbor

Studentski zbor je najviše predstavničko tijelo studenata unutar Fakulteta čiji je rad definiran Statutom. Članovi Studentskoga zbora kroz aktivno sudjelovanje u radu Fakultetskog vijeća Tehničkog fakulteta, odbora i povjerenstva participiraju u kreiranju politike Fakulteta.

Studentski zbor dužan je braniti interese studenata, upozoravati na nepravilnosti i nepravde te sufinancirati i podržavati rad studentskih udruga i organizacija na Fakultetu. Sufinanciran od strane Fakulteta i Sveučilišta u Rijeci i u okviru svojih mogućnosti, Studentski zbor raspolaže određenim sredstvima predviđenim za sudjelovanje u troškovima studentskih projekata te za rad njihovih udruga i organizacija. Preko svojega ovlaštenoga predstavnika aktivno sudjeluje i u tijelima odlučivanja unutar Sveučilišnog zbora Sveučilišta u Rijeci.

#### Student council

The Student Council is the highest representative body of the students on the Faculty whose work is defined by the Statute. Members of the Student council through active participation in the work of the Faculty council of the Faculty of engineering, boards and commissions participate in the creation of the Faculty policy.

Student Council must defend students' interest, warn on irregularities and injustices, and cofinance and support work of student associations and organizations on the Faculty. Within their possibilities and co-financing from the Faculty and University of Rijeka, it's having certain financial support provided for student projects and for work of their organizations and associations. Trough their in-charge member, they are also actively involved in deciding within Student Council of University of Rijeka.





#### IEEE sb Rijeka

IEEE, Institute of Electrical Engineers, je stručna neprofitna organizacija koja djeluje širom svijeta. Udruga je nastala 1884. godine na inicijativu nekolicine znanstvenika radi praćenja razvoja elektrotehnike te je prerasla u najveću svjetsku stručnu udrugu s više od 425 tisuća članova.

Posredstvom svojih članova IEEE je vodeći autoritet na širokom tehničkom području, od računalnih znanosti, biomedicinske tehnologije i telekomunikacija, preko električne energije, potrošačke elektronike te mnogih drugih područja. Svojom djelatnošću IEEE nastoji poticati, organizirati i pomagati tehničke aktivnosti širom svijeta.

Riječki studentski ogranak IEEE trenutno okuplja tridesetak studentskih članova koji sudjeluju na raznim državnim i međunarodnim događajima i daju svoj doprinos u organizaciji raznih događanja u riječkom području.

#### IEEE sb Rijeka

IEEE, the Institute of Electrical Engineers, is a professional non-profit organisation active worldwide. The association, which was established in 1884 at the initiative of several scientists with the aim of monitoring the development of electrical engineering, has grown into the world's largest professional association with more than 425.000 members.

Through its members, the IEEE is a leading authority in wide technical areas ranging from computer science, biomedical technology and telecommunications, electrical energy to consumer electronics and several other fields. With its activity the IEEE aims to encourage, organise and assist technical activities worldwide.

The Rijeka IEEE student branch currently comprises about thirty student members participating in various national and international events, thus giving their contribution to the organisation of different events in the area of Rijeka.

#### RITEH akademski sport

Studenti i zaposlenici Tehničkog fakulteta aktivni su i na sportskim terenima, te postižu i zapažene rezultate.

Zanimljivo je istaknuti naše sudjelovanje na regatama u mornarskom veslanju u muškoj i ženskoj konkurenciji, jedriličarskim regatama, kao i na veslačkim natjecanjima.

Naši studenti se u više disciplina natječu i u UNISPORT ligi koja označava sva sportska prvenstva Sveučilišta u Rijeci koja se održavaju pod okriljem Riječkog športskog sveučilišnog saveza. Oni su ostvarili titutlu najuspješnijeg fakulteta u muškoj i ukupnoj konkurenciji, najuspješnijeg sportaša i najuspješnijeg voditelja UNISPORT lige 2015.-2016.

#### RITEH sport

Students and employees of the Faculty of Engineering are also active in sports fields, and achieve remarkable results.

It is interesting to point out participation in Regatta in Sailor Rowing in men's and women's competition, sailboat regattas, as well as in rowing competitions.

Our students are competing in several disciplines in the UNISPORT league as well, which includes all the sports competitions of the University of Rijeka held under the auspices of the Rijeka Sports University Association. They have earned the title of the most successful faculty in male and overall competition, the most successful athlete and the most successful leader of UNISPORT League 2015.-2016.







# CITEH



