



Stevens Institute of Technology, (SIT)
1, Castle Point Terrace, Hoboken, NJ 07030, USA
Website: www.stevens.edu



About Institute:

1. SIT is a private, coeducational research university located in Hoboken, New Jersey, United States.
2. The university also has a satellite location in Washington, D.C.. Incorporated in 1870.
3. It is one of the oldest technological universities in the United States and was the first college in America solely dedicated to mechanical engineering.
4. Stevens includes more than 5,000 undergraduate and graduate students representing 47 states and 60 countries throughout Asia, Europe and Latin America.
5. The university is home to three national Centers of Excellence as designated by the U.S. Department of Defense and U.S. Department of Homeland Security.
6. Two members of the Stevens community, as alumni or faculty, have been awarded the Nobel Prize: Frederick Reines (class of 1939), in Physics, and Irving Langmuir (Chemistry faculty 1906–1909), in chemistry.

Research Centers & Labs

Stevens houses three National Centers of Excellence -- advanced research facilities selected by the U.S. government to lead national research, development and education efforts to address crucial global needs.

1. Atlantic Center for the Innovative Design & Control of Small Ships (ACCeSS)
2. Maritime Security Center (MSC)
3. Systems Engineering Research Center (SERC)

Core Research Areas

1. Business & Finance
2. Complex Systems, Networks & Network Security
3. Data Science, Data Visualization & Data Engineering
4. Design & Manufacturing
5. Energy & Environment
6. Healthcare & Biomedical
7. Marine/Naval Architecture, Engineering & Management
8. Operations, Analytics & Decision Sciences
9. Program & Process Management
10. Resiliency & Sustainability of Coastal Urban Environments
11. Technology, Culture, Politics & the Arts

Additional Research Centers & Labs at Stevens

1. Center for the Advancement of Secure Systems and Information Assurance (CASSIA)
2. Center for Complex Systems and Enterprises (CCSE)
3. Center for Distributed Quantum Computing
4. Center for Decision Technologies
5. Center for Environmental Systems (CES)
6. Center for Healthcare Innovation (CHI)
7. Center for Innovation in Engineering & Science Education (CIESE)
8. Davidson Laboratory
9. Design & Manufacturing Institute
10. Hanlon Financial Systems Center (FSC)
11. Highly Filled Materials Institute
12. The NJ Center for Micro chemical Systems

List of Professors and Projects offered for UG Fellowship

Stevens Institute of Technology has given details of projects and guides as follows:-

1. Prof. Kirshore Pochiraju, Mechanical Engineering Dept.
 - i. 3D printing for medical applications
 - ii. Novel materials for 3D printing
2. Prof. Ramana Vinjamuri (Biomedical Engineering Dep.)
 - i. Computer vision
 - ii. Brain-machine interface
 - iii. Forensics
3. Prof. Hong Man (ECE)
 - i. Semantic image and video segmentation
 - ii. Sentiment analysis with media and text fusion
 - iii. Muti-voxel pattern analysis in functional MRI
4. Prof. Jose Ramirez Marquez (School of Systems & Enterprises)
 - i. Data analytics and visualization
5. Prof. Chandramouli (ECE)
 - i. Software defined radio and networking
 - ii. Text mining
6. Prof Yi Guo
 - i. Robotics projects

For more details about Steven's Institute you can refer to following links

1. [Research Centre and Labs](#)
2. [Core Research Areas](#)
3. [Faculty Research](#)
4. [Student Research](#)
5. [Innovation & Entrepreneurship](#)
6. [Working with Stevens](#)



University of Rome Tor Vergata

Website: <https://web.uniroma2.it/home/newlang/english>

About the University of Rome "Tor Vergata"

1. The University of Rome "Tor Vergata" is one of the newest, largest, and most lively public universities in Italy.
2. As a center for scientific research and high education, it is of great renown in the fields of Economics, Engineering, Law and Medicine.
3. Currently, Rome "Tor Vergata" offers to its over 40,000 students a total of 37 degree programs in the framework of its 6 Schools, of Economics, **Engineering**, Law, Humanities, Medicine, and Sciences.
4. As far as international relations are concerned, the University of Rome Tor Vergata counts more than 500 bilateral and cultural/scientific cooperation agreements with partner Universities worldwide to promote joint research programmes and academic exchanges. (Universities of Brazil; George Washington University; Harvard University; the University of Oxford; the University of California, Irvine)
5. "Study portals, a platform for international studies founded in 2007, awarded the University of Rome Tor Vergata with the "Very Good International Student Satisfaction 2014" medal. Such medal is assigned basing on reviews by international students who attended "Tor Vergata": in their rankings our University ratings scored 8 to 8.9 out of 10.

Facts And Figures:

Some numbers of the University of "Tor Vergata"

- 44.000 Students
- 1472 Researchers, Associate Professors and Full Professors
- 492 Laboratories
- 27 Departments
- 78 Ph.D. Courses
- 330 Grants assigned per year
- 676 Grants for Ph.D.
- 554 Erasmus Grants generated per year

Engineering sciences Department:

Possible professional applications include: mechanical computer-aided design, Electronics, Thermo-Mechanics, Electro mechanics, plant management and control, production of goods and services within electromechanical industries and energy production and management, technical and commercial companies, innovation management and supply chain. Being a Bachelor's Degree, students will typically complete their education with a Master's Degree in Italian or in English.

Web References: <http://www.engineering-sciences.uniroma2.it>

ICT & Internet Engineering:

ICT and Internet Engineering fulfils the need for a new wave of further job opportunities in both technology and service industry, owing to the trend towards big data , smart infrastructures, software-rich networks, Internet of Things, smartphone applications etc. The course offers opportunities in many sectors currently revolutionized by ICT in Italy and abroad: Web-based Systems, Services, Application Design, ICT Technologies, Integration for Web Enterprises, Energy, Health, Environment Protection, Tourism, Automotive, Constructions, Defense, Public Administration, Cybersecurity and last but not least your start-up.

Website: <http://internet.uniroma2.it/>

Coordinator: Professor Giuseppe Bianchi

E-mail: giuseppe.bianchi@uniroma2.it

Civil and Environmental Engineering

Environmental and Territorial Engineering: companies, public and private institutions and firms that design, plan, build and manage works, control and monitoring systems for the environment and local areas, soil protection, waste management, raw materials, environmental, geological and energy resources; bodies assessing environmental impact and compatibility of plans and works.- Safety, Civil, Environmental, Territory Engineering: major infrastructure, construction sites, industrial areas, local authorities, public and private institutions that develop activities of prevention and safety management and wherever responsibility profiles are needed under current legislation to check safety conditions.

Website: <http://dicii.uniroma2.it/?PG=47.1.1>

Coordinator: Professor Giulia Viggiani

E-mail: viggiani@uniroma2.it

Computer Engineering

Graduates can work in businesses, public administration, as freelancers and in consulting firms. They can: install, set up, manage and maintain communication networks, computing plants and systems at both distributed and mobile levels; shape, design and implement complex architectures and automatic systems; perform formal and vocational education activities in Computer Science; assist specialists in Informatics and Telematics research. They can work in civil, economic, industrial, transport, energy, avionics, Satellite, medical, environmental and land sectors.

Website: http://inginformatica.uniroma2.it/index.php/laurea_triennale

Mechanical Engineering

Typical professional fields for graduates include: product and process design, production, management and organisation, assistance, technical and commercial facilities; they may operate as freelancers or in manufacturing, services and public administrations. Particularly relevant tasks cover: design of mechanical and thermomechanical systems; design and implementation of production processes and industrial plants; direction and management of production processes; plant management and control; innovation development and management.

Website: <http://ingegneriemeccanica.uniroma2.it/>

Coordinator: Professor Stefano Cordiner

E-mail: cordiner@uniroma2.it

Medical Engineering

Graduates can complete their education with a Master Degree.

The main work opportunities for graduates relate to the following areas in Biomedical Engineering: companies operating in the biomedical and pharmaceutical sectors as manufacturers and suppliers for systems, equipment and materials for diagnosis, treatment and rehabilitation; public and private hospitals; service companies managing medical equipment and systems for telemedicine; specialised laboratories. Their main profiles and tasks include: equipment and system management; technical functions in healthcare organisations; system management (in particular health-oriented ones).

Website <http://ing.uniroma2.it/corsi-di-laurea/ingegneria-medica/>

Coordinator: Professor Paolo Bisegna

E-mail: bisegna@uniroma2.it

Materials Sciences

Graduates in Materials Sciences can directly access a Master Degree in Science and Technology of Materials. Moreover, having acquired experimental scientific knowledge, they will be able to carry out activities relating to the following functions: physical and chemical characterisation of materials; synthesis of inorganic and polymeric materials; quality controls on materials, products and processes. The industrial sectors interested in such professional figures are primarily manufacturing ones involved in the production of goods with chemical, mechanical, aeronautical or electronic characteristics. Further manufacturing sectors for environmental improvement, energy saving and cultural heritage conservation shall be mentioned as web

Website: <http://www.scienze.uniroma2.it/?cat=142>

Coordinator: Professor Ivan Davoli



National Technical University of Ukraine 'Kyiv Polytechnic Institute' is one of the oldest and largest technical universities in Europe, founded in 1898. NTUU KPI is famous for its academic excellence and leading innovative research.

NTUU KPI ranks first nationally, and is world recognized in the number of graduate academic and research programs in the top ten in their field.

40 500 students study at 29 University Colleges.

The education process begins at the Preparatory School of the Centre of International Education. One can choose the language of study amongst the three available: Ukrainian, Russian, and English.

Various department under IEE

1. Department of Power Supply
2. Department of Thermal Engineering and Energy Saving
3. Department of Electric-Complexes Control Automation - ECCA

Research AREAS AVAILABLE IN ECCA are:

1. Energy savings in home
2. Energy efficiencies in home
3. Energy savings by car
4. Alternative energy sources
5. The latest technologies in energy saving
6. Department of Engineering Ecology - EE
7. Department of Electromechanical Equipment for Energy-Consumption Industries - EECCI,

Partnerships with foreign universities:

1. Wismar and Leipzig higher technical schools,
2. Wroclaw and Harbin Polytechnic Institutes,
3. Silesian Technical University,
4. Universities of the CIS.

Today scientists of IEE perform joint international projects on

1. The rights of partnership:
2. the installation and integration of solar batteries into the thermal network,
3. The modernization of heating tanks to the grant of the Government of Denmark,
4. The creation of a network of energy network in Central Asia,
5. The establishment of the association between energy faculties of ten universities in Central Asia, EU countries, Eastern Europe to promote regional cooperation.
6. Department of geological building and mining technologies - GBMT
7. Department of Labor, Industrial and Civil Security - LICs,

Various department under EPEA

1. Department of Power System Automation (AE) –
2. Department of Automation of Electromechanical Systems and Electric Drive (AEMCEP)
3. Department of Renewable Energy Sources (VDE) –
4. Department of Electromechanics (EM) –
5. Department of Electrical Power Systems and Networks (EMS) - Department of Electric Power Plants (ES) –
6. Department of High Voltage Engineering and Electrophysics Department of Theoretical Electrical Engineering (TOE) –

Scientific research of department focuses on three areas:

1. Fundamental research of major problems of natural sciences, social sciences and humanities;
2. New technologies and alternative technologies in the energy sector;
3. New computer tools and information technologies.

Institute for Applied System Analysis

1. Department of System Research
2. Department of Mathematical Methods of Systems Analysis, MMSA
3. Department of System Design, SD
4. Training course faculty
5. Faculty of second higher and postgraduate education

Departments of Institute of Telecommunication Systems

1. Department of Information Communications Networks
2. Department of Telecommunications - TK,
3. Department of Telecommunication Systems - TS,

Institute of Mechanical Engineering

1. Department of Dynamics and Strength of Machines and Strength of Materials
2. Department of Applied Mechanics
3. Department of Manufacturing Engineering
4. Department of Mechanics of Material Plasticity and Resource Saving Processes
5. Department of Laser Systems and Physical Technologies –
6. Department of Applied Hydro-Aeromechanics and Mechatronics
7. Department of Design of Machine Tools and Machines
8. Department of Integrated Mechanical Engineering
9. Institute of Publishing and Printing
10. Department of Graphic Arts - DGA,
11. Department of Reprography - DR,
12. Department of Printing Technology - DPT,
13. Department of Printing Machines and Automated Complexes - PMAC,
14. Department of Publishing Management, Printing and Bookselling - PMPB,
15. Department of Publishing Studies - PS,

Institute of Physics and Technology

1. Department of Applied Physics
2. Department of Power Systems Physics
3. Department of Information Security
4. Department of Mathematical Methods of Information Security
5. Department of Physical and Technical Methods of Information Security

About Institute:

- Aarhus University is a prestigious public university located in Aarhus, Denmark. Founded in 1928, it is Denmark's second oldest university. Aarhus University's main campus is located in central Aarhus.
- The 2015 National Taiwan University Ranking ranks it as the 88th best in the world
- The 2016 Shanghai Ranking ranks Aarhus University as the 65th best university in the world.
- Notable Alumni: - Jens Christian Skou, Danish chemist and Nobel Prize laureate in Chemistry 1997.
- Facts of AU Students-42,500,Staff-11,500,Budget (EUR million)- 840

Major Research Centres

Aarhus University is home to 15 Centres of Excellence supported by the Danish National Research Foundation and a considerable number of major research centres. The 15 Centres of Excellence are

- Centre for Insoluble Protein Structures (INSPIN)
 - Centre for Geomicrobiology
 - Centre for Materials Crystallography (CMC)
 - Centre for DNA Nanotechnology
 - Centre for Functionally Integrative Neuroscience (CFIN)
 - Centre on Autobiographical Memory Research (CON AMORE)
 - Centre for Massive Data Algorithmic (MADALGO)
 - The Water and Salt Research Centre
 - Centre for Carbonate Recognition and Signalling (CARB)
 - Centre for Research in Econometric Analysis of Time Series (CREATES) which is one of the best econometrics centre according to <https://ideas.repec.org/top/top.ecm.html>. Currently this centre is positioned as second best centre of research in econometric time series analysis. Furthermore, this centre is considered [citation needed] as one of the best places to study a PhD in Econometrics.
 - Centre for Oxygen Microscopy and Imaging (COMI)
 - Centre for mRNP Biogenesis and Metabolism
 - Centre for Quantum Geometry of Moduli Spaces (QGM)
 - Centre for the Theory of Interactive Computation
 - Centre for Theoretical Chemistry (qLEAP)
 - Centre for Membrane Pumps in Cells and Disease (PUMPKIN)
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Opportunities and Courses in AU

Computer, electronics and healthcare

Bachelor of Engineering:

Electronic Engineering - Aarhus*
Electronics - Herning*
Electrical Power Technology*
Information Technology*
Healthcare technology*

MSc in Engineering:

Electrical Engineering
Computer Engineering
Biomedical Engineering*

International programme

Bachelor's level
Applied App Development

Mechanics

Bachelor of Engineering:

Mechanical Engineering*

MSc in Engineering:

Mechanical Engineering

International Programme

Bachelor's level
Mechanical Design

Civil and architectural engineering

Bachelor of Engineering:

Civil and Structural Engineering*
Architectural Engineering*

MSc in Engineering:

Civil and Architectural Engineering
Technical Geology

International Programme

Bachelor's level
Urban Water

Biological and Chemical engineering

Bachelor of Engineering:

Chemical Engineering*

Biotechnology Engineering*

MSc in Engineering:

Biotechnology and Chemical Engineering

Innovation & Production (Herning)

Bachelor of Engineering:

Business Development Engineer*

Global Management and Manufacturing

MSc in Engineering:

Technology Based Business Development

Place of study: AU Herning

Aarhus School of Architecture:

<http://aarch.dk/>

Video link of AU:-

<https://www.youtube.com/watch?list=PLhSj0GiCgYkvNNKPPi9BwjSe5CZerijd8&v=rbnmCOCmG1Q>

For More Details Visit: - www.au.dk

About the Institute:

The Technical University of Sofia is the first and largest university, having fostered the emergence of most of the higher technical colleges in the country with the highest accreditation grade of all higher schools in Bulgaria, setting educational standards and introducing national priorities for development of education and science.

The University is a leader in the field of nanotechnologies, virtual engineering, energy efficiency, renewable energy resources, engineering ecology and engineering design, in application of the best practices as philosophy and fundamental principles in engineering.

In return for the numerous research and educational projects, the University now avails of educational and research facilities at top level, unique not only for our country, but for Central and Eastern Europe: highly efficient computer systems with the power of a supercomputer, a laboratory for virtual reality, laboratory for innovative ideas, a laboratory for rapid 3D prototyping, workshops and halls where prototypes of products and services can be developed, which afterwards will be tested and put on the market; an Energy Analysis Centre, a Centre for Microclimate, Energy and Environment Studies, a Centre for Peak Scientific Achievements, Development and Transfer of Technologies, the most contemporary Centre for Robotics and Automation in Bulgaria and many others.

Research Labs:

1. System for radio control and ecology monitoring
2. Mechatronics lab in faculty of Mechanical Engineering
3. Applied research laboratory "BELLA" (Contactless apparatus)
4. Laboratory "Simulation modelling in Industry"
5. Laboratory "CAD/CAM/CAE in industry"
6. Research and Development Laboratory "Coordinate Measurements in Mechanical Engineering" (R&D Lab "CMME")
7. "Electromagnetic compatibility of communication systems"
8. The Centre for research and design in human comfort, energy and environment
9. The Electronics Computer Aided Design (ECAD) Laboratory
10. Research Laboratory for Electrophysical Technologies for Thermal Treatment of Metals
11. The Research and development laboratory on Semiconductor circuits design
12. Laboratory for hydraulic elements, machines and systems
13. Software of measuring instruments; Electromagnetic compatibility of the instrument
14. Information and measurement systems.
15. R&D Lab Vibrations and Acoustic Noise.

Ural Federal University **Yekaterinburg, Russia**

Yekaterinburg is the fourth largest city in Russia. Yekaterinburg is the main industrial and cultural centre of the Ural Federal District. The Ural Branch of the Russian Academy of Sciences and numerous other scientific research institutes and establishments are in Yekaterinburg. Yekaterinburg is considered the leading educational and scientific centre of the Urals. These institutions include the Ural Federal University (comprising Ural State University and Ural State Technical University).

Ural Federal University (UrFU) is one of the largest higher educational institutions in Russia bringing together fundamental education and innovative approach towards the challenges of modern times.

Ural Federal University offers a wide range of degree and doctoral programs in Russian and English. It consists of many institutes like Natural Sciences, Mathematics and Computer Sciences, Material Sciences and Metallurgy, Radioelectronics and Information Technologies, Mechanics and Machine Building, Civil Engineering, Power Engineering, Physics and Technology, Chemical Engineering and many more.

University-wide partnership agreements

Ural Federal University has a vast number of partnership agreements with universities and companies in Africa, Asia, Europe, North and Latin America. In India it has academic agreement with India Jaro Education (jaro.in), Jawaharlal Nehru University (jnu.ac.in), Sharda University(www.sharda.ac.in), University of Delhi(du.ac.in/du/), VIT University(www.vit.ac.in), ViMEET(vishwaniketan.edu.in).



AIT
CENTER
OF EXCELLENCE
FOR RESEARCH
AND EDUCATION

Perceptum est Optimum

Athen's Institute of Technology, (AIT)

Monumental Plaza, Building C, 1st Floor,

Leof. Kifisias 44, Marousi 151 25, Greece

Website: www.ait.gr



About Institute:

1. Athens Information Technology (AIT), an internationally-renowned nonprofit education and research center in the fields of information technology, telecommunications, and innovation management.
2. In its 12 years of existence, AIT has become a beacon of research and education excellence in the field of ICT in Greece and beyond, achieving an impressive number of important milestones that clearly form an outstanding record for any institution of its size and youth
3. A recent survey listed AIT as the 1st non-public academic institution in Greece.
4. In less than a decade of active involvement in external research fund raising, AIT ranks 7th in Greece in the EU ICT funding arena.
5. AIT runs regularly a number of industry-commissioned research projects, on target topics that give a clear competitive advantage to the corresponding companies; these also result in a number of patents for the generated intellectual property.
6. AIT is a key player in Greece's emerging startup ecosystem, with its own faculty having spun already three technology startups.

Research Centers & Labs

AIT's facilities include fully equipped state-of-the-art laboratories which support the educational and research activity, as well as spacious fully equipped internal infrastructure conducive to hosting conferences/seminars/workshops, lectures and other educational activities.

1. Optical Communications Systems and Networks Laboratory
2. B-WISE Management Laboratory
3. Autonomic and Intelligent Systems Laboratory(Smart Room)
4. Software Systems and Web Technologies (SSWT) Laboratory
5. Cryptography & Information Security Laboratory
6. Innovation Management Laboratory

Core Research Areas

1. Optical Communication and network with systems supporting advanced and demanding applications
2. Audio- visual speech recognition, gesture recognition, automatic classification of documents, and context aware working spaces.
3. Wireless Sensor networks, Distributed signal processing algorithms
4. Design and development of software systems, distributed OS, web services and web applications
5. Information and system security
6. Cryptography in networking and e commerce

List of Professors and Projects offered for UG Fellowship

Stevens Institute of Technology has given details of projects and guides as follows:-

- 1. Prof. Constantinos B. Papadias, Fellow, IEEE-Dean AIT**
 - i) Communication systems and networks
 - ii) Signal processing: adaptive algorithms for communication transmission and reception, beam forming / space-time coding / multi-dimensional signal processing for multi-user wireless networks, subspace techniques for direction finding, multi-dimensional sensing techniques, mixed analog-digital signal design for hybrid active / passive antenna arrays, unsupervised learning / blind identification of linear systems / channels with applications that range from wireless spatial multiplexing to optical communications, biomedical signal processing, etc.
- 2. Prof. Ioannis Tomkos (Head-High Speed Networks and Optical Communications.)**
 - i) Core Network design and transmission Systems
 - ii) Technical aspects of telecommunication systems and networks
 - iii) Next generation cloud networks , data-center networking to support cloud services
- 3. Dr. Aristodemos Pnevmatikakis**
 - i. Multimodal detection
 - ii. Tracking and identification
 - iii. Recognition in intelligent spaces
- 4. Gregory Yovanof / Professor**
- 5. John K. Soldatos / Associate Professor**
- 6. Ioannis Christou / Professor**
- 7. Sofoklis Efremidis / Assistant Professor**
- 8. Fotios Talantzis / Assistant Professor**
- 9. Dimitrios Klonidis / Assistant Professor**