Islamic Azad University; Science and Research Branch
Graduate School of the Environment and Energy

Graduate School of the Environment and Energy of Science and Research Branch in Islamic Azad University, has spared no efforts to expand its research and educational activities at postgraduate and doctorate levels in the past 20 years. These efforts have successfully resulted in training and educating of quality lecturers, researchers and experts who now serve across the country and abroad. Quite a few of the first doctoral graduates of the faculty have achieved associate professor rank in different universities where they lecture and conduct and lead research projects. Noting its activities in publication, education and research areas, the FEE has been identified as a ‘distinguished institution’ amongst other environmental faculties in the country. These achievements are the result of the past and present activities of the faculty which will only be continued and expanded in future. With the support and collaboration of the higher authorities, the university administrators and the alumni the school is determined to progress and flourish as a non-governmental scientific and research center at world level. The faculty began activities in 1990 in 3 major disciplines, namely Environmental Engineering, Environmental Management and Environmental Sciences, at post-graduate and Ph.D. levels. Since the first semester of 2003-2004 the School is offering master degree in Environmental Law and Environmental Economics, these being sub-disciplines of Environmental Management. Starting with the first semester of 2004-2005, Environment Design Engineering and Water Resources, being sub-disciplines of Environmental Engineering, have admitted students at the Masters level. From 2004-5 the Energy Engineering has also been included in the initiated School.

The Graduate School is composed of 19 postgraduate Departments as follow:

1. Department of Environmental Management
2. Department of Environmental Economics
3. Department of Environmental Law
4. Department of HSE Management
5. Department of Environmental Education
6. Department of Environmental Science – Biodiversity
7. Department of Environmental Science – Land use Planning
8. Department of Environmental Science – Pollution
9. Department of Environmental Engineering – Air Pollution
10. Department of Environmental Engineering – Water/ Wastewater Pollution
11. Department of Environmental Engineering – Water Resources
15. Department of Renewable Energies Engineering
16. Department of Energy Economics
17. Department of Environmental Design
18. Department of Remote Sensing and GIS
19. Department of Environmental Geology
Postgraduate degrees offered by the School cover a broad range of environment and energy issues:

**Ph.D Degree**

1. Environmental Sciences
2. Environmental Management
3. Environmental Law
4. Environmental Engineering
5. Energy Systems Engineering

**M.Sc Degree**

1. Environmental Management
2. Environmental Law
3. Environmental Economics
4. Health, Safety and Environmental Management (HSE)
5. Environmental Education
6. Environmental Sciences: Biodiversity
7. Environmental Sciences: Land-use Planning and Assessment
8. Environmental Sciences: Environmental Pollution
9. Environmental Design Engineering
10. Energy Systems Engineering: Energy Technologies
12. Renewable Energies Engineering
13. Energy Economics
15. Remote Sensing and GIS: Soil and Water Resources
18. Environment Engineering: Air Pollution
19. Environment Engineering: Water and Wastewater
20. Environment Engineering: Water Resources
21. Environmental Geology
The curricula for the disciplines offered at the School are as follows:

**M.Sc in Environmental Management: Curricula**

**Prerequisite Courses**
1- Computer: Basics  
2- English: General Course  
3- English: Specialized Course  
4- Mathematical Statistics  
5- Introduction to Environment  
6- Environmental Pollution  
7- Principles of Management and Systems Theory  
8- Application of Statistics in Environmental Management  
6- Ecology of Wildlife and Natural Resources

**Mandatory courses**
1- Ecological Capacity Assessment  
2- Assessment of Development Impacts on Environment  
3- Research Methodology in Environmental Management  
4- Environmental Management and Planning  
5- Methods and Techniques of Environmental Management  
6- Sustainable Development and Environment  
7- Energy Management and Environment  
8- Environmental Management Workshop  
9- Management Seminar

**Optional courses**
1- Environment Education  
2- Iran’s Terrestrial and Marine Natural Ecosystems  
3- Environmental Management Standards and Regulations  
4- Politics and Law in Environmental Management  
5- Application of Statistics in Environmental Management  
6- GIS Application in Environment  
7- Economic Valuation of Natural Resources  
8- Waste Management
Ph.D in Environmental Management: Curricula

Prerequisite Courses
1- Economic Instruments in Environmental Management
2- Persistent Pollutants in Environment
3- Politics and Law in Environmental Management
4- Wildlife and Natural Resources Management
5- Application of Statistics in Environmental Management
6- English: Specialized Course

Mandatory courses
1- Regional and International Environmental Challenges
2- Modeling and Simulation in Environmental Management
3- Project Management
4- Industrial Ecology
5- Special Topics

Specialized Courses
1- Assessment of Energy Production Impacts on Environment
2- Advanced Methods and Techniques of Environmental Management
3- Health, Safety, Environment and Quality (HSEQ) Management System

Optional courses
1- Remote Sensing and GIS Application in Environmental Management and Assessment
2- Information and Communication Technology Application in Environmental Management
3- Integrated Management System (IMS)
4- Risk Assessment and Management in Environment
5- Public Education and Participation in Environment
6- Regional and Urban Environmental Management

M.Sc in Environmental Economics: Curricula
1- Computer: Basics
2- English Language: General Course
3- English Language: Specialized Course
4- Statistical Mathematics
5- An Introduction to the Environment
6- Environmental Pollution
7- Micro-economics
8- Macro-economics
9- Environmental Planning and Management
10- Environmental Impact Assessment (EIA)
11- Fundamentals of Environmental Economics
12- Environmental Economics
13- Environmental Accounting
14- Economic Valuation of Natural Resources
15- Environmental Economics Workshop
16- Economics Seminar
17- Sustainable Development and Environment
18- Natural Ecosystems of Iran (Aquatic and Terrestrial)
19- Environmental Management Standards and Regulations
20- Energy Economics
21- Application of Statistics in Environmental Management
22- Geographic Information Systems (GIS) in Environment
23- Development Economics and the Third World Issues
24- Economy of Iran
25- Thesis

M.Sc in Environmental Law: Curricula
1-English Language: General Course
2-English Language: Specialized Course (1)
3-English Language: Specialized Course (2)
4-Computer: Basics
5-Introduction to Environment
6-Environmental Pollution
7-Environmental Degradation
8-Basics of Law
9-Principles of Environmental Law
10-Public International Law
11-Civil Law
12-Codes of Procedure
13-International Environmental Law
14-National Environmental Law
15-Criminal Environmental Law
16-Environmental Planning and Management
17-Assessment of Development Impacts on Environment
18-Workshop on Environmental Law
19-Seminar
20-Law of the Sea and International Law
21-Planning Acts and Environmental Policies
22-Human Rights and Environment
23-Civil Liabilities and Environmental Damages
24-National and International Organization
25-Law of Natural Resources and Water
26-Environmental Ethics
27-Solid and Hazardous Wastes Law
28-Thesis

Ph.D in Environment Law: Curricula
1- Planning and Management
2- Environmental Pollution
3- Research Methodology In Law
4- Fundamentals of Law
5- Analysis of Principles of Environmental Law
6- National Environmental Law
7- International Environmental Law
8- Introduction to Environmental Legal Terms
9- Pollution Law
10- Natural Resources Law
11- Comparative Environmental Law
12- Analysis of International Law
13- International Liabilities of Governments Towards Environmental Damages
14- Claims and Defenses in Environmental Law
15- Courts Ruling and Judicial Precedents in Connection with Environmental Protection
16- Introduction to Judicial Proceedings of Environmental Claims in Courts (Practical)
17- Environmental Protection During Armed Conflicts
18- Legal Instruments for Resolving Regional and International Environmental Challenges
19- Textual Interpretation of Precautionary Environmental Rules
20- Concepts Sustainable Development in Environmental Law
21- Energy and Industrial Law
22- Civil Law , Citizenship and Environment
23- Seminar on Environment Law
24- Special Thematic subject
25- Thesis
M.Sc in HSE Management: Curricula

**Prerequisite Courses**
1- Computer: Basics
2- English Language: General Course
3- English Language: Specialized Course
4- Statistical Mathematics
5- Principles of Management and Systems Theory
6- Environmental Pollutions
7- Principles of Industrial Safety
8- Fundamentals of Occupational Health
9- HSE Research Methodology
10- An Introduction to Industrial Processes

**Mandatory Courses**
1- Occupational Health Management
2- Risk Management and job Safety
3- Management Advanced Theories
4- Human Resources Advanced Management
5- Organizational Behavior Advanced Management
6- Safety, Health and Environmental Management System
7- Environmental Pollutions Management and Control
8- HSE Regulations and Standards

**Optional courses**
1- Economic Valuation of Risk Management
2- Risk Management Workshop
3- Application of Statistics in HSE
4- Crisis Management
5- Waste Management
6- HSE Education Management

**Thesis**
Thesis
M.Sc in Environmental Education: Curricula
1- English Language: Specialized Course
2- Advanced Statistics and Research Methodology
3- Principles of Management
4- Principles of Planning
5- Principles of Sociology
6- Imam's Testaments
7- Methods and Techniques of Environmental Planning, Management and Education (1)
8- Iran's Natural Ecosystems (Terrestrial)
9- Economics of Development and the Third World Issues
10- Principles and Philosophy of Education Environmental Education Workshop (1)
11- Methods and Techniques of Environmental Planning, Management and Education (2)
12- Environmental Education Workshop (2)
13- Energy and Environment
14- Assessment of Development Impacts on Environment
15- Iran's Natural Ecosystems (Marine)
16- Communications in Education
17- Mass Communications Techniques
18- Thesis

M.Sc in Environmental Sciences / Habitats & Biodiversity: Curricula

Mandatory courses
1- Vertebrates Management & Protected Areas
2- Land Use Planning
3- Geographical Information System in Environment
4- Industrial Pollution
5- Research Methodology
6- Thesis
7- Seminar

Specialized courses
1- Complementary Ecology of Vertebrates
2- Management of Wetland & Migratory Birds
3- Biodiversity Management
4- Evaluation of Habitats

Optional courses
1- Population Dynamics Analysis
2- Complementary Habitat Evaluation
MSc. in Environmental Sciences / Environmental Pollution: Curricula

Mandatory courses
1-Vertebrates Management & Protected Areas
2- Land-use Planning
3- Geographical Information System in Environment
4- Industrial Pollution
5- Research Methodology
6- Thesis
7-Seminar

Specialized courses
1- Marine Pollution
2- Wastes & Recycling
3- Complementary Environmental Pollution
4- Landfill Site Selection & Design

Optional courses
1-Population Dynamics Analysis
2- Complementary Habitat Evaluation
3- Complementary Genetics
4- Chemistry of Pollutions
5- Surface & Ground Water Pollution
6- Sewage Treatment
M.Sc in Environmental Sciences/ Land-use Planning Evaluation: Curricula

Mandatory courses

1-Vertebrates Management & Protected Areas
2- Land-use Planning
3- Geographical Information System in Environment
4- Industrial Pollution
5- Research Methodology
6- Thesis
7- Seminar

Specialized courses

1-Environmental Impacts Assessment
2-Complementary Remote Sensing
3- Land Evaluation
4- Assessment & Planning Workshop

Optional courses

1-Population Dynamics Analysis
2- Complementary Habitat Evaluation
3- Complementary Genetics
4- Chemistry of Pollutions
5- Surface & Ground Water Pollution
6- Sewage Treatment
7- Energy & Environment
8- Determination of Habitats Capacity
9- Computer based Land-use Planning
10- Plant Cartography
11- Ornithology
Ph.D in Environment Sciences: Curricula

Mandatory courses

1- Trace Elements in Environment
2- Sustainable Development and Natural Resources
3- Environmental Geography of Iran
4- Interaction between Human and Eco-systems
5- Seminar

Optional courses for Environmental Pollution

1- Impact of Pollutants on Natural Resources
2- Radioactive Substances and Environment
3- Control Methods of Environmental Pollution
4- Wastes and Hazardous Wastes Management
5- Energy and Environment
6- Pollutants Sampling and Analysis
7- Environmental Law
8- Methods of Environmental Assessment
9- Seminar (2)
10- Remote Sensing and Its application in Environment
11- Geographical Information System (GIS) and its Application in Environment
12- Advance Research Methods

Optional courses for Habitats & Biodiversity

1- Assessment of Wetland Habitats
2- Assessment of Terrestrial Habitats
3- Complementary Ornithology
4- Multi – variable Statistics
5- Biodiversity Protection
6- Wildlife Protection
7- Advanced Behavioral Science
8- Methods of Environmental Assessment
9- Seminar (2)
10- Remote Sensing and Its application in Environment
11-Geographical Information System (GIS) and its Application in Environment
12- Advance Research Methods

Optional courses for Environmental Land-use Planning

1- Ecological Assessment of Natural Resources
2- Environmental Law
3- Analytical Approaches in Environmental Case Studies
4- Environmental Requirements of the Society
5- Regional and International Environmental Issues
6- Remote Sensing and Its Application in Environment
7- Analysis of Environmental Assessment and Planning Methods
8- Methods of Environmental Assessment
9- Seminar (2)
10- Remote Sensing and Its application in Environment
11- Geographical Information System (GIS) and its Application in Environment

M.Sc in Environment Engineering: Air Pollution: Curricula

Prerequisite courses
1- English Language: General Course
2- English Language: Specialized Course
3- Computer: Basics
4- Computer programming
5- Engineering Mathematics
6- Thermal & Fluid Mechanics
7- Introduction to Environmental Management & Planning
8- Water Treatment
9- Waste Water Treatment
10- Air pollution and Control
11- Solid Waste pollution and Control

Optional courses
1- Meteorology
2- Air Pollutants Emission Control
3- Atmospheric Pollution Control
4- Measurement & Evaluation of Air Pollutants
5- Industrial Ventilation
6- Noise Pollution and Control
7- Special Topics

**Seminar & Thesis**
1- Seminar
2- Thesis

**Ph.D in Environment Engineering/Air Pollution: Curricula**
1-Processing & Recycling of Solid Waste
2-Composting
3- Hazardous Solid Waste
4- Meteorology
5- Air Pollutant Emission Control
6- Atmospheric Pollution Control
7- Measurement & Evaluation of Air Pollutants
8- Industrial Ventilation
9- Waste Water Treatment
10- Air pollution and Control
11- Solid Waste pollution and Control
12- Advanced Engineering Mathematics
13- Environmental modeling
14- Energy and Environment
15- Dissertation

**M.Sc in Environment Engineering: Water and Wastewater: Curricula**

**Prerequisite courses**
1- English Language: General Course
2- English Language: Specialized Course
3- Computer: Basics
4- Computer programming
5- Engineering Mathematics: basics
6- Thermal & Fluid Mechanics

**Mandatory courses**
1- Introduction to Environmental Management Planning
2- Water Treatment
3- Waste Water Treatment
4- Air pollution Control
5- Solid Waste pollution Control

Optional courses
1- Water and Wastewater Treatment plant Design
2- Physical, Chemical and Biological Treatment Processes
3- Industrial Wastewater Treatment
4- Water and Wastewater Operation
5- Water Transfer and Distribution
6- Sewage and Surface Water Collection and Control
7- Wastewater Recovery and Reuse
8- Water and Wastewater Microbiology

Seminar & Thesis
1- Seminar
2- Thesis

Ph.D in Environmental Engineering: Water and Wastewater Curricula
1- Water Treatment
2- Wastewater Treatment
3- Air Pollution Control
4- Solid Waste Pollution Control
5- Water and Wastewater Treatment Plant Design
6- Physical, Chemical and Biological Treatment Processes
7- Industrial Wastewater Treatment
8- Water and Wastewater Operation Laboratory
9- Water Transfer & Distribution
10- Sewage and Surface Water Collection and Control
11- Wastewater Recovery & Reuse
12- Water and Wastewater Microbiology
13- Groundwater Resources Development
14- Groundwater Hydrology and Pollution
15- Advanced Hydrology
16- Surface Water Hydrodynamics
17- Surface and Groundwater Pollution
18- River Engineering
19- Marine pollution Control
20- Water Resource Quality Management
21- Soil Pollution
22- Data Gathering and Environmental Assessment by Remote Sensing
23- Solid-waste, Collection and Transportation
24- Solid-waste Analysis & Land-filling

**M.Sc in Environment Engineering / Water Resources: Curricula**

**Prerequisite Courses**
1- English Language: General Course
2- English Language: Specialized Course
3- Computer: Basics
4- Computer programming
5- Engineering Mathematics
6- Engineering Hydrology
7- Thermal & Fluid Mechanics
8- Water & Waste Water Chemistry & Microbiology

**Mandatory courses**
1- Introduction to Environmental Management and Planning
2- Water Treatment
3- Wastewater Treatment
4- Advanced hydrology
5- Surface & Ground Water Pollution

**Optional courses**
1- Ground Water Hydrology & Pollution
2- Surface Water Hydrodynamic
4- River Engineering
5- Sea Water Pollution & Control
6- Modeling and Water Quality Management
7- GIS & RS in Environment

**Seminar & Thesis**
1- Seminar
2- Thesis
M.Sc in Energies Systems Engineering: Energy and Environment :Curricula

Mandatory Courses
1- Principles of Renewable Energy (1)
2- Principles of Renewable Energy (2)
3- Applied Statistics & Mathematics
4- Energy Systems Design
5- Energy Conversion & Storage
6- Energy & Environment
7- Energy Auditing & Measurement Laboratory

Optional Courses
1- Systems Analysis & Energy Auditing
2- Solar Energy (Basics & applications)
3- Nuclear Energy (Basics & applications)
4- Wind Energy (Basics & applications)
5- Hydro Energy (Basics & applications)
6- Biomass & Biogas Energy (Basics & applications)
7- Bio Energy (Basics & applications)
8- Hydrogen Energy & Fuel cell
9- Energy Resources and Consumptions
10- Energy Management and Economics

M.Sc in Energy Systems Engineering / Energy Technologies;
M.Sc in Energy Systems Engineering / Energy Modeling:

Mandatory Courses
1- Energy Systems Analysis
2- Advanced Mathematical Programming
3- Process Engineering
4- Risk Analysis & Reliability
5- Basic Principles of Economics

Optional courses for Energy Systems
1- Energy Modeling
2- Energy & Environment
3- Optimal Development of Electrical Energy Systems
4- Exhaustible Resources Economics
5- Exergy Flow Optimization
6- Pinch Technology
7- Econometrics
8- Economy & Energy

Optional courses for Energy Technologies
1- Wind, Hydro, Biomass & Tidal Power Plants Technologies
2- Thermal, Solar, Hydrogen Power Plants Technologies
3- Oil Refining Engineering
4- Energy Intensive Industries
5- Energy Consumption in Material Engineering
6- Advanced Power Systems Operation
7- Electrical Energy Distribution Systems
8- Energy Conversion & Storage Technologies
9- Thermal Systems Design

Optional courses for Energy and Environment
1- Advanced Fluid Mechanics
2- Advanced Thermodynamics
3- Introduction To Environment
4- Energy: Environmental Side Effects
5- Environmental Pollutions
6- Pollution Reduction Techniques
7- Environmental Economics
8- Energy Recovery Systems
9- Environmental Assessment
10- Identification of Food Industries Pollutant

M.Sc in Energy Economics: Curricula
Prerequisite Courses
1- Petroleum Chemistry
2- Exploration and Extraction (Upstream)
3- Oil & gas refining (Downstream)
4- Crude Oil, Gas and Oil Products Transportation
5- Petrochemical Industries
6- Principles of Financial Management and Accounting
7- Microeconomics
Mandatory Courses
1- Microeconomics
2- Macroeconomics
3- Econometrics
4- Economics of Natural Resources
5- Economics of Energy

Optional Courses
1- Economics of Development
2- Economy of Iran
3- International Trade
4- International Marketing
5- International Transport and Insurance
6- Principles of International Commercial Law and Finance

M.Sc in Environment Design Engineering: Curricula

Prerequisite Courses
1- English Language: General Course
2- English Language: Specialized Course
3- Computer Application in Design
4- Introduction to Landscape
5- Preparatory Design Workshop
6- Mapping and Visual Design
7- Statistics and Research Method in Environmental Design
8- Introduction to the Environment

Mandatory courses
1- Environmental Design Principles
2- Garden History and Persian Garden
3- Environmental Design Workshop I
4- Environmental Design and Engineering Techniques
5- Environmental Planning and Design
6- Planting Design
7- Urban planning and Design
8- Environmental Design Workshop II
9- Seminar

**Optional courses**
1- Environmental Impact Assessment (EIA)
2- Environmental Design for Sustainability
3- Materials and Techniques of Construction
4- GIS in Environmental Design
5- Environmental Law
6- Advanced Environmental Design Computer Application
7- Environmental Aesthetics

**Thesis**
Thesis

**M.Sc in Remote Sensing and GIS: Curricula**

**Mandatory courses**
1- Computer and Graphic Software
2- Physics and Principles of Remote Sensing
3- Photogrammetry
4- Digital Image Processing and Interpretation
5- Geographic Information Systems Principles
6- Digital Terrain Model Structure DTM
7- Spatial Analysis using Geographic Information System

**Optional courses for Urban and Rural Studies**
1- Application of GIS and Remote Sensing in Urban and Rural Environment
2- Rural Development Planning in Iran
3- Urban Planning
4- Computer Programming
5- Software Programming
6- Soil Erosion
7- Environmental Studies in Rural Planning
8- Rural Management
Optional Courses for Soil and Water Resources
1- Soil Erosion
2- Computer Programming
3- Software Programming
4- Water Resources Planning in Iran
5- Satellite-based Oceanography
6- Satellite-Based Meteorology
7- Satellite Image Interpretation in Soil and Water Resources
8- Surface Water Hydrological Studies with emphasis on Iran
9- Underground Water Hydrological Studies with Emphasis on Iran

M.Sc in Environmental Geology : Curricula

Prerequisite Courses
1- Philosophy and Evolution of Geography
2- Fundamentals of Economic Geography
3- Fundamentals of Urban Geography
4- Fundamentals of Rural Geography
5- Cartography and Thematic Mapping

Mandatory Courses
1- Methodology of Research in Tourism
2- Geographical Schools and Theories
3- Theoretical Foundations of Planning
4- Geographical Technologies
5- Rural and Nomadic Tourism

Specialized Courses
1- Geotoursim
2- Biotoursim
3- Climate and Serenity in Ecotourism
4- Ecotoursim and Health
5- Ecotourism Design and Planning
6- Economics a, Marketing and Ecotourism
7- Ecotoursim Monitoring and Evaluation
8- Ecotourism Ethics, Statutes and Regulations
The School Strategic Plan

1. Promote Research
2. Advance Learning
3. Accelerate Internationalization

Promote Research

Actions:

- Actively seek and pursue research ideas - from faculty and staff members, students and individuals and organizations outside the university - that involve cross-unit participation
- Develop and refine interdisciplinary environmental and energy research projects and programs to address the changing needs of society
- Make joint, mutually beneficial faculty hires and contribute to salary support on a long- or intermediate-term basis
- Help departments recruit new faculty members with environmental and energy research interests
- Alert interested the faculty members to opportunities for interdisciplinary environmental and energy research and outreach projects and to potential funding sources
- Help faculty and staff members prepare and submit interdisciplinary environmental and energy research proposals
- Provide logistical support to faculty and staff members for interdisciplinary environmental research projects
- Share indirect cost recovery accruing from extramural grants with the home departments of investigators, as appropriate
- Enhance cross-campus communication and networking on environmental and energy concerns
- Explore new ways to support schools, departments, and other units in environmental and energy research
- Develop and strengthen collaborative research projects with other public and private organizations at the state, national, and international levels
- Facilitate links with faculty members, departments, and schools at other universities to strengthen our own research activities
- Promote use of the Science and Research campus and community as a living laboratory to teach, test, and demonstrate environmentally and energy sound practices.
Advance Learning

A. General
Actions:

- Actively seek and pursue learning ideas - from faculty and staff members, students and individuals and organizations outside the university - that involve cross-unit participation
- Help promote department-based courses with environmental and energy content and where the school academic programs, encourage cross-listing with the institute
- Offer joint courses, with credit (and teaching budget) following the instructors
- Organize, sponsor, and promote environmental events and related activities jointly with other campus units whenever possible
- Seek the best applications of old and new instructional technologies to enhance the learning experience of students
- Make joint, mutually beneficial faculty hires that contribute to the institute's teaching mission
- Explore new ways to support schools, departments, and other units on environmental and energy matters
- Enhance cross-campus communication and networking on environmental and energy concerns
- Promote use of the community as a living laboratory to teach, test, and demonstrate environmentally sound practices
- Facilitate links with faculty members, departments, and schools at other universities to strengthen our own instruction, research, and outreach activities.

B. Graduate and Professional Education
Actions:

- Develop and refine interdisciplinary environmental graduate programs to address the changing needs of society
- Increase the pool of potential advisers for the school graduate students
- Strive to ensure financial support for as many school graduate students as possible
- Alert school graduate students to significant environmental and energy learning opportunities within University schools and departments and elsewhere in the country
- Involve more graduate students in special environmental and energy programs and opportunities, such as study abroad and internships
• Refer graduate student inquiries and applications received by the school to other academic units at University if the students' goals would be better met there.

Accelerate Internationalization

Actions:

• Develop and strengthen collaborative instruction, research, and outreach projects with other public and private organizations at the international level
• Join other interested units in bringing international environmental and energy scholars and experts to campus as speakers or short- or long-term visitors.

Mission and Goals of the Graduate School Program:

The Graduate School of the Environment and Energy is designed to provide graduates with the necessary skills to make scientific, engineering and managerial decisions and provide leadership in environmental science, engineering and management as well as energy engineering careers.

The Graduate School programs combine environmental science, engineering, management and energy engineering, economics, policy, law and business concepts to prepare students in five areas:

1. Business Knowledge: Understanding of executive, strategic and operational business concepts as they apply to environmental and energy issues;

2. Analytical Skills: Use of quantitative mathematical/statistical methods as well as program-specific computer applications and online tools to assess and interpret data and other information whether it is of laboratory, field, engineering, financial or managerial origin;

3. Managerial Skills: Comprehension of the leadership, facilitation, negotiation and coordination techniques that are effectively used to address environmental and energy issues among employees, organizations, communities and nations;

4. Technical Knowledge: Problem solving in selected areas of regulatory compliance and enforcement; basic and applied the energy and environmental science; engineering and management for risk reduction;
behavior- and audit-based hazard management systems and project administrative tasks;

5. Integrative Skills: Ability to integrate business knowledge, analytical skills, managerial skills and technical knowledge into effective actions and presentations.

Admissions

In addition to the requirements stated in Admission Policies, the student must hold a bachelor's degree in some branch of engineering or related science or present other evidence of adequate preparation for graduate study in Civil and Environmental Engineering.

Transfer of Credit

After being admitted, a student pursuing a graduate program leading to the master's degree may transmit a written petition to the Dean of the Graduate school requesting permission to transfer up to 6 graduate quarter credits taken while a graduate student in another recognized Graduate school to be applied toward the master's degree here. These credits cannot have been used to fulfill the requirements of a previous degree. The petition must be accompanied by a written recommendation from the Departmental Education Director.

It is the responsibility of the student to ensure that all requirements are satisfied well before the expected graduation date. In order to check this students are required to:

- prepare a coursework plan
- verify it with the checklist
- Obtain approval from their Department or educational Office of the school, before the end of their first quarter in the M.S. program.

2) Ph.D. Degrees:
The Doctor of Philosophy degree (Ph.D.) is intended for candidates with a high level of scholarship or personal finance support and with the ability and desire to conduct independent and original research in their chosen field of interest. A graduate student can become a candidate for the Ph.D. degree only by meeting definite requirements and standards of the Graduate school, Department and Program. The student's first step is to obtain a Master's degree. A student pursuing a master's degree within the Department who displays unusual capability may be encouraged his/her Master's Department to continue to work toward the Doctorate. Students may also be accepted directly into a Ph.D. degree program if they have received a Master's degree from an accredited university and have been highly recommended by their previous program faculty to pursue a Doctor of Philosophy degree.
B. Graduate and Professional Education

Actions

- Develop and refine interdisciplinary environmental health graduate programs to address the changing needs of society
- Increase the pool of potential advisers for the department graduate students
- Strive to ensure financial support for as many department graduate students as possible
- Alert department graduate students to significant environmental health engineering and science learning opportunities within university schools and departments and elsewhere in the country
- Involve more graduate students in special environmental health programs and opportunities, such as study abroad and internships
- Refer graduate student inquiries and applications received by the school to other academic units at university if the students' goals would be better met there.

Accelerate Internationalization

Actions

- Develop and strengthen collaborative instruction, research, and outreach projects with other public and private organizations at the international level
- Join other interested units in bringing international environmental health scholars and experts to campus as speakers or short- or long-term visitors.

Faculty Members

The Graduate School of the Environment and Energy enjoys the presence of the following faculties, as whose specialties and interests are briefly presented.
FULL PROFESSORS

- Jafar Nouri
- Faramarz Moatar
- Mahmoud Karami
- Seyed Ahmad Mirbagheri
- Mehdi Borghei
- Mahmoud Shariat
- Ghasemali Omrani
- Nematallah Khorasani
- Parvin Nassiri
- Sadegh Zibakalam Mofrad
Jafar Nouri

Full professor and School Dean

- **Ph.D.** Environmental Science, London University, London, UK, 1980
- **M.Sc.** Environmental Science, London University, London, UK, 1977
- **B.Sc.** Biology, Tehran University, Tehran, Iran, 1971

Department of Environmental Management, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +9821-4486 7177
Fax: +9821-4486 9443

E-mail: nourijafar@gmail.com
Homepage: [http://www.tums.ac.ir/faculties/jnouri](http://www.tums.ac.ir/faculties/jnouri)

- **Division**
  Department of Environmental Management

- **Teaching interests**
  Industrial Ecology
  Urban Environmental Management
  Environmental Impact Assessment
  Soil Bioremediation
  Heavy Metals in the Environment

- **Research interests**
  Industry and Environmental Interactions
  Environmental impact assessment of industrial and urban projects
  Heavy metals pollution in the environment
  Soil Bioremediation
  Environmental Modeling

- **Membership in Scientific Associations**
  New York Academy of Science
  Iranian Association of Environmental Health (IAEH)
  Iranian Society of Environmentalists (IRSEN)
Faramarz Moattar
Full professor

- **Ph.D.** Nuclear Chemistry, Karlsruhe University of Engineering, Karlsruhe, Germany, 1971.
- **M.Sc.** Nuclear Chemistry, Karlsruhe University of Engineering, Karlsruhe, Germany, 1967.
- **B.Sc.** Nuclear Chemistry, Karlsruhe University of Engineering, Karlsruhe, Germany, 1964.

Department of Environmental Engineering, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 130 4380
Fax: +9821 4486 9443

E-mail: namoattar@yahoo.com
Homepage: [http://www.srbiau.ac.ir/faculties/moattar](http://www.srbiau.ac.ir/faculties/moattar)

- **Division**
  Department of Environmental Engineering – Air Pollution

- **Teaching interests**
  Environment and energy
  Environmental pollution
  Radioactive materials in environment

- **Research interests**
  Nuclear science
  Nuclear engineering
  Environmental pollution

- **Membership in Scientific Associations**
  Iranian Nuclear Social
  Environmental Social
  Physical Social of Iran
  Chemical Engineering Social of Iran
Mahmoud Karami

Full professor

- **Ph.D.** Animal Ecology, Colorado University, Fort Collins, USA, 1981.
- **M.Sc.** Zoology, Tehran University, Tehran, Iran, 1977.
- **B.Sc.** Biology, Tehran University, Tehran, Iran, 1975.

Department of Biodiversity,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 277 0511
Fax: +9821 4486 5005

E-mail: mkarami@chamran.ut.ac.ir

- **Division**
  
  Department of Biodiversity

- **Teaching interests**
  
  Wildlife ecology
  Habitat evaluation
  Quantitative ecology
  Population dynamics
  Principles of vertebrate management

- **Research interests**
  
  Population dynamics of Iranian wildlife
  Habitat evaluation for Iranian mammals
  Ecology and taxonomy of Iranian mammals
  Impact assessment of development on habitats of Iranian wildlife

- **Membership in Scientific Associations**
  
  IUCN – Species Survival of Mammalogists
  American Society of Mammalogists
Nematollah Khorasani

Full professor

- **Ph.D.** Environment and Forest, BOKU University, Vienna, Austria, 1978.
- **M.Sc.** Environment and Forest, BOKU University, Vienna, Austria, 1975.
- **B.Sc.** Forestry, School of Natural Resources, University of Tehran, Karadj, Iran, 1973.

Department of Biodiversity,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 148 1805
Fax: +98261 224 5908

E-mail: Khorasan@ut.ac.ir
Homepage: [http://www.srbiau.ac.ir/faculties/khorasani](http://www.srbiau.ac.ir/faculties/khorasani)

- **Division**
  Department of Biodiversity

- **Teaching interests**
  - Environmental science
  - Natural resources ecology
  - Sustainable development of natural resources

- **Research interests**
  - Environmental science
  - Environmental engineering
  - Environmental management

- **Membership in Scientific Associations**
  - The Iranian National Committee on Irrigation and Drainage (IRNCID)
  - The Man and the Biosphere (MAB)
  - International Union of Forest Research Organizations (IUFRO)
  - Iranian Society of Environmentalists (IRSEN)
  - Agriculture and Natural Resources Engineering Disciplinary Organization
Seyed Ahmad Mirbagheri
Full Professor

- **Ph.D.** Civil Engineering-Water Resources and Environmental Engineering, University of California, Davis, USA, 1981.
- **M.Sc.** Civil Engineering- Water Resources, University of California, Davis, USA, 1977.
- **B.Sc.** Soil and Water Engineering, Tabriz University, Tabriz, Iran, 1974.

Department of Environmental Engineering,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 137 4337
Fax: +9821 8803 5516

E-mail: seyedahmad_mirbagheri@yahoo.com

- **Division**
  Department of Environmental Engineering – Water Resources

- **Teaching interests**
  - Hydrology
  - Water quality modeling
  - Water resources engineering
  - River engineering and sediment transport
  - Water and wastewater treatment system design

- **Research interests**
  - Modeling
  - Hydrology
  - Water and wastewater
  - Water quality and environmental engineering

- **Membership in Scientific Associations**
  - Iranian Society of Environmentalists (IRSEN)
  - ASCE, AGFN
  - Iranian Civil Engineering Association
  - Iranian Environment Association
Mehdi Borghei

Full professor

- Ph.D. Environmental Engineering, Newcastle University, Newcastle, UK, 1976.
- B.Sc. Chemical Engineering, Newcastle University, Newcastle, UK, 1971.

Department of Environmental Engineering, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 113 0394
Fax: +9821 6600 5417

E-mail: mborghesi@sharif.edu
Homepage: http://www.srbiau.ac.ir/faculties/borghei

- Division
  Department of Environmental Engineering – Water and Wastewater

- Teaching interests
  Bioprocess engineering
  Industrial wastewater treatment and reactor design
  Water and wastewater treatment systems design and engineering

- Research interests
  Environmental engineering
  Environmental biotechnology
  Water and wastewater engineering

- Membership in Scientific Associations
  Iranian Academy of Science
  Public Health Engineering Association
Mahmoud Shariat
Full professor

- **Ph.D.** Environmental Health, Tulane University, USA, 1976.
- **Dr.** Pharmacy, Tehran University, Tehran, Iran, 1960.

Department of Land use Planning, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 109 9005
Fax: +9821 4486 5005

E-mail: shariatm@yahoo.com
Homepage: http://srbiau.ac.ir/faculties/shariat

- **Division**
  Department of Land use Planning

- **Teaching interests**
  Environmental pollution
  Environmental impact assessment

- **Research interests**
  Water pollution
  Methods of impact assessment
  Environmental impact assessment

- **Membership in Scientific Associations**
  Iranian Society of Environmentalists (IRSEN)
  Iranian Association of Environmental Health (IAEH)
Ghasemali Omrani

Full professor

- **Ph.D.**  Environmental Protection, Ustus Leibig University, Giessen, Germany, 1973
- **M.Sc.**  Agriculture, Ustus Leibig University, Giessen, Germany, 1969.
- **B.Sc.**  -

Department of Environmental Engineering, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 154 6837
Fax: +9821 4486 5005

E-mail: omranigh@tums.ac.ir
Homepage: http://www.tums.ac.ir/faculties/omrani

**Division**

Department of Environmental Engineering – Solid Waste

**Teaching interests**

- Composting
- Biogas production
- Solid Waste Recycling
- Solid Waste Management
- Hazardous Wastes management

**Research interests**

- Sanitary landfill
- Vermi compost and biocompost
- Solid Waste management and Recycling
- Hospital and hazard waste management

**Membership in Scientific Associations**

- Iranian Society of Environmentalists (IRSEN)
- Iranian Association of Environmental Health (IAEH)
Majid Ahmadian
Full professor

- B.Sc. Economics, Tehran University, Tehran, Iran, 1976.

Department of Environmental Economics, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +9821 88002394
Fax: +9821 4486 9443

E-mail: mahmadian@ut.ac.ir
Homepage: http://srbiau.ac.ir/faculties/ahmadian

- Division
  Department of Environmental Economics

- Teaching interests
  Resource Economics (Exhaustible and renewable)
  Economics Valuing of Environmental Resources
  Microeconomics
  Environmental National Account
  Environmental Economics
  Energy Economics

- Research interests
  Water Economics
  Environmental Industrial Economics
  Oil and Energy Economics
  Effects of Government Policies on Energy

- Membership in Scientific Associations
  Iranian Economics Association
  Energy Economics Association
  Iranian Society of Environmentalists (IRSEN)
Parvin Nassiri
Full professor

- **Ph.D.** Physics, Universite' des Sciences et Techniques du Languedoc, Montpellier, France, 1980.
- **M.Sc.** Health Physics, Tehran University, Tehran, Iran, 1975.
- **B.Sc.** Physics, National University of Iran, Tehran, Iran, 1970.

Department of HSE Management,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 123 0502
Fax: +9821 4484 8443

E-mail: parvin.nassiri@gmail.com
Homepage: http://www.tums.ac.ir/faculties/nassiri

- **Division**
  Department of HSE Management

- **Teaching interests**
  Noise and vibration pollution
  Pollution assessment and control
  ESP in environmental engineering
  Ionizing and non-ionizing radiation protection
  Health, safety and environmental management
  Magnetic and electronic fields in industry and environment

- **Research interests**
  Physics
  Environment
  Health physics
  Health, safety & Environment (HSE)

- **Membership in Scientific Associations**
  Iranian Society of Environmentalists (IRSEN)
  Iranian Physics Society
  Iranian Occupational Health Association (IOHA)
Mohammad Hassan Panjeshahi

Full Professor

- **Ph.D.** Chemical Engineering, UMIST University, UK, 1992.
- **M.Sc.** Chemical Engineering, UMIST University, UK, 1988.
- **B.Sc.** Oil Refining, Sharif University of Technology, Iran, 1985.

Department of Energy Systems,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 112 0757
Fax: +9821-4486 9443

E-mail: mhpanj@ut.ac.ir
Homepage: http://tehran.academia.edu/mhassanpanjeshahi

- **Division**
  Department of Energy Systems – Energy Technologies

- **Teaching interests**
  Pinch Analysis
  Energy Analysis
  Co-Generation

- **Research interests**
  Process Integration
  Pinch and Exergy Analysis
  Energy Conservation
  Renewable Energy
  Chemical Engineering,
  Water Treatment
Sadegh Zibakalam Mofrad

Full Professor

- **Ph.D.** Peace Studies, University of Bradford, UK, 1989
- **M.Sc.** MBA, Harvard University In cooperation with Industrial Management Institute of Tehran, USA / Iran, 1974
- **M.Sc.** Chemical Engineering, University of Bradford, UK, 1973
- **B.Sc.** Chemical Engineering, University of Huddersfield, UK, 1971

Department of Environmental Law,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 324 0957
Fax: +9821 4489 9443

E-mail: zibaklam@ut.ac.ir
Homepage: http://srbiau.ac.ir/faculties/zibakalam

- **Division**
  Department of Environmental Law

- **Teaching interests**
  Civil Law, Citizenship and Environment
  Human Rights and Environment

- **Research interests**
  Modern Iranian Political Development
ASSOCIATE PROFESSORS

- Amirhesam Hassani
- Nabiollah Mansouri
- Seyed Mustafa Khezri
- Amirhossein Javid
- Alireza Gharagozlou
- Aliesghar Alesheikh
- Morteza Khalajiasadi
- Hassanali Laghai
- Ahmad Tavassoli
Amir Hessam Hassani
Associate Professor

- **Ph.D.** Environmental Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2000.
- **M.Sc.** Environmental Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 1994.
- **B.Sc.** Applied Chemistry, Islamic Azad University, Tehran, Iran, 1991.

Department of Environmental Engineering, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 103 9899
Fax: +9821 4486 7194

E-mail: ahhassani@gmail.com
Homepage: [http://www.srbiau.ac.ir/faculties/hassani](http://www.srbiau.ac.ir/faculties/hassani)

- **Division**
  Department of Environmental Engineering – Water and Wastewater

- **Teaching interests**
  - Fluid mechanic
  - Water pollution
  - Water quality control
  - Water and wastewater treatment
  - Water and wastewater treatment plant design

- **Research interests**
  - Sludge treatment and optimization
  - Water quality and water pollution control
  - Industrial and urban wastewater treatment and wastewater reuse
  - Water treatment by membrane technology/ ion exchange technology
  - Wastewater treatment by nanofilter technology/sequence batch reactors

- **Membership in Scientific Associations**
  - Iranian Society of HVAC
  - Society of Water and Wastewater
  - Urban Environmental Committee
  - Iranian Society of Environmentalists (IRSEN)
Nabiollah Mansouri
Associate Professor

- **Ph.D.** Environmental Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2003.
- **M.Sc.** Occupational Health, Tehran University of Medical Sciences, Iran, 1991.
- **B.Sc.** Biology, Kermanshah University, Kermanshah, Iran, 1988.

Department of HSE Management,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 126 2426
Fax: +9821 2206 0435

E-mail: nmansourin@gmail.com
Homepage: [http://www.srbiau.ac.ir/faculties/mansouri](http://www.srbiau.ac.ir/faculties/mansouri)

- **Division**
  Department of HSE Management
  Department of Environmental Engineering – Air Pollution

- **Teaching interests**
  Air pollution
  Research methods
  Risk management
  Industrial ventilation, environmental pollutions

- **Research interests**
  Air pollution
  Air pollutants measurement
  Risk management
  Air pollutants control in workplaces

- **Membership in Scientific Associations**
  Iranian Society for Occupational Health
  Iranian Society of Environmentalists (IRSEN)
Seyed Mustafa Khezri
Associate Professor

- **Ph.D.** Environmental Engineering, Tarbiat Modares University
  Tehran, Iran, 1997.
- **M.Sc.** Environmental Engineering, Sharif University of Technology
  Tehran, Iran, 1992.
- **B.Sc.** Mechanical Engineering, Sharif University of Technology
  Tehran, Iran, 1978.

Department of Environmental Engineering,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 6767181
Fax: +9821 4486 9443

E-mail: khezri@sharif.edu
Homepage: http://www.srbiau.ac.ir/faculties/khezri

- **Division**
  Department of Environmental Engineering – Water Resources
  Department of Environmental Engineering – Water and Wastewater

- **Teaching interests**
  Water resources engineering
  Water and wastewater treatment
  Water and wastewater management
  Fluid mechanic and thermodynamic
  Environmental management systems

- **Research interests**
  Sludge reuse
  Water reuse
  Industrial wastewater treatment
  Water & wastewater minimization management systems

- **Membership in Scientific Associations**
  Iranian Society of Environmentalists (IRSEN)
  Sweden Borg Scientific Association
  American Water Resources Association
  Australian Water Association
Amirhossien Javid
Associate Professor

- **Ph.D.** Environmental Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2001.
- **M.Sc.** Civil Engineering, Shiraz University, Shiraz, Iran, 1984.
- **B.Sc.** Sanitary Engineering, IMS University, Tehran, Iran, 1980.

Department of Environmental Engineering, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 103 7369
Fax: +9821 4486 5010

E-mail: ahjavid@gmail.com
Homepage: http://www.srbiau.ac.ir/faculties/javid

- **Division**
  Department of Environmental Engineering – Water Pollution

- **Teaching interests**
  River engineering
  Wastewater treatment
  Mathematical engineering
  Sewerage and runoff network design
  Surface and underground water pollutions

- **Research interests**
  Water and wastewater treatment
  Pollution modeling (sea and river)
  Environmental Impact Assessment (EIA)

- **Membership in Scientific Associations**
  Iranian Society of Environmentalists (IRSEN)
  World Energy Council, National Energy Committee
  Iranian Water Resources Association (IR- WRA)
  Marine Science and Technology Society
  Iranian Petroleum Institute
Alireza Gharagozlou
Associate Professor

- B.Sc. Geomatics Engineering, K.N. University, Tehran, Iran, 1992.

Department of Remote Sensing and GIS, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 130 9098
Fax: +9821 6607 1131

E-mail: agharagozlu@yahoo.com
Homepage: http://srbiau.ac.ir/faculties/gharagozlu

- Division
  Department of Remote Sensing and GIS

- Teaching interests
  Geo-spatial Information Systems- GIS
  Remote sensing and photogrametry
  Digital mapping and image interpretation
  Land use planning – environmental planning and assessment

- Research interests
  Natural disaster and GIS/RS
  GIS/RS and development planning
  EIA and GIS Environmental modeling and GIS
  Urban planning – Environmental planning and GIS

- Membership in scientific associations
  Iranian GIS/RS Society (IRSGS)
  Iranian Society of Environmentalists (IRSEN)
  International Society for Photogrammetry and Remote Sensing (ISPRS)
Ali Asghar Alesheikh
Associate Professor

- **Ph.D.** Geospatial Information System, University of Calgary, Calgary, Canada, 1997.
- **M.Sc.** Geomatics Engineering, University of New Brunswick, Fredericton, Canada, 1992.
- **B.Sc.** Geomatics Engineering, KNT University of Technology, Tehran, Iran, 1987.

Department of Remote Sensing and GIS, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 159 7191
Fax: +9821 4486 9443

E-mail: alesheikh@kntu.ac.ir
Homepage: http://sahand.kntu.ac.ir/~alesheikh

- **Division**
  Department of Remote Sensing and GIS

- **Teaching interests**
  Remote sensing
  Environmental modeling
  Geospatial Information System (GIS)
  Spatial Decision Support System (SDSS)

- **Research interests**
  GIS modeling
  Uncertainty in GIS
  GIS/RS applications
  GIS and artificial intelligence
Hassanali Laghai
Associate Professor

- **Ph.D.** Architecture, University of Florence, Italy, 1985
- **M.Sc.** Architecture, University of Tehran, Iran, 1980
- **B.Sc.** Architecture, University of Tehran, Iran, 1975

Department of Environmental Design, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 103 4903
Fax: +9821 4486 9443

E-mail: hassanlaghaei@yahoo.com
Homepage: http://srbiau.ac.ir/faculties/laghai

- **Division**
  Department of Environmental Design

- **Teaching interests**
  Environmental Design Principles
  Introduction to Landscape
  Environmental Design Workshop

- **Research interests**
  Architecture
  Urbanization
  Environmental Design
Morteza Khalajiasadi
Associate Professor

- **B.Sc.** Machine design, Science and Technology University of Iran, Tehran, Iran, 1975.

Department of Energy Engineering, 
Graduate School of the Environment and Energy, 
Science and Research Branch, IAU, 
Tehran, Iran

Tel.: +98912 327 2508  
Fax: +9821 4486 5047

E-mail: mkhassadi@yahoo.com  

- **Division**
  Department of Energy System – Energy and Environment

- **Teaching interests**
  Renewable energy  
  Power plant design  
  Energy saving in building  
  Energy management in industries

- **Research interests**
  Renewable energy (Wind, Solar)

- **Membership in Scientific Associations**
  Iranian Solar Energy Society
Ahmad Tavassoli  
Associate Professor

- **Ph.D.** Chemical Engineering, University of Tehran, 2005  
- **M.Sc.** Chemical Engineering, Isfahan University of Technology, 1997  
- **B.Sc.** Chemical Engineering, Petroleum University of Technology, 1994

Department of Energy Engineering,  
Graduate School of the Environment and Energy,  
Science and Research Branch, IAU,  
Tehran, Iran

Tel.: +98912 2988426  
Fax: +9821 6649 52 91

E-mail: tavassolia@khayam.ut.ac.ir  
Homepage: http://srbiau.ac.ir/faculties/tavassoli

- **Division**  
  Department of Energy Engineering – Energy Technology

- **Teaching interests**  
  Reaction Energy  
  Transport Phenomena  
  Chemistry and Technology of Oil  
  Biomass and Biogas Energy

- **Research interests**  
  Refining and Conversion of Oil and Gas  
  Biomass and Biogas Energy

- **Membership in scientific associations**  
  Iranian Society of Chemical Engineering
ASSISTANT PROFESSORS

- Reza Arjmandi
- Seyed Masoud Monavari
- Mostafa Panahi
- Naser Moharramnejad
- Alireza Vafaienejad
- Aida Biati
- Zahra Abedi
- Hamidreza Ghaffarzadeh
- Farideh Atabi
- Farzam Babaei
- Ali Mohammadi
- Hooman Farzaneh
- Parvin Farshchi
- Alireza Haji Seyed Mirzahosseini
- Mohamad Reza Miri Lavasani
- Mehdi Ramezani
- Lobat Taghavi
- Hossein Mousavi Fatemi
- Mohamad Reza Moghaddam
- Mohammad Reza Tabesh
- Mohamad Bagher Sadogh
- Borhan Riazi
- Mir Masoud Kheirkhah
- Tourdj Dana
- Bahram Aminipouri
- Khosrow Bakhtari
- Dariush Karimi
- Abdolreza Karbassi
- Jamal Ghoddosi
- Mansour Pournouri
- Mohammad Reza Heibati
- Hossein Ghadamian
- Abdul Razaq Kaabi-nejadi
- Jamal Ghoddosi
Reza Arjmandi
Assistant professor

- **Ph.D.** Environmental Management, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2000.
- **B.Sc.** Agriculture-Plant Protection, Tehran University, Tehran, Iran, 1969.

Department of Environmental Management, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 327 4632
Fax: +9821 4486 5005

E-mail: rezaarjmandi@yahoo.com
Homepage: http://www.srbiau.ac.ir/faculties/arjmandi

- **Division**
  Department of Environmental Management

- **Teaching interests**
  Project management
  Iran natural ecosystem
  Principle of management
  Environmental management
  Sustainable development and environment

- **Research interests**
  Environmental economy
  Sustainable development
  Environmental management
  Urban management and environment
  Pesticides impacts to the environment

- **Membership in Scientific Associations**
  Iran Rice Society
  Iran Entomologists Society
  Tehran University Agricultural Graduated Society
  Iranian Society of Environmentalists (IRSEN)
Seyed Masoud Monavari
Assistant Professor

- **Ph.D.** Environmental Science, Islamic Azad University, Science and Research Branch, Tehran, Iran, 1999.
- **M.Sc.** Environmental Management, Islamic Azad University, Science and Research Branch, Tehran, Iran, 1992.
- **B.Sc.** Business Management, Oklahoma State University, Oklahoma, USA, 1980.
- **B.Sc.** Regional Planning, University of Esfahan, Isfahan, Iran, 1977.

Department of Land Use Planning,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 177 2380
Fax: +9821 8802 9916

E-mail: monavarism@yahoo.com
Homepage: [http://www.srbiau.ac.ir/faculties/monavari](http://www.srbiau.ac.ir/faculties/monavari)

- **Division**
  Department of Land Use Planning

- **Teaching interests**
  Land use planning
  Solid waste management
  Soil waste disposal design
  Environmental assessment workshop
  Environmental management workshop
  Environmental Impact Assessment (EIA)

- **Research interests**
  Solid waste
  Land use planning
  Environmental Impact Assessment (EIA)

- **Membership in Scientific Associations**
  International Association of Impact Assessment
  Iranian Society of Environmental Assessment
  Iranian Society of Environmentalists (IRSEN)
Mostafa Panahi
Assistant Professor

- **Ph.D.** Forest and Environmental Economics, University of Tehran, Tehran, Iran, 2005.
- **M.Sc.** Forest Economics, Tarbiat Modarres University, Tehran, Iran, 1994.
- **B.Sc.** Forestry and Forest Engineering, University of Tehran, Tehran Iran, 1990.

Department of Environmental Economics,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 103 0926  
Fax: +9821 4486 5004  
E-mail: mostafa.panahi@gmail.com  
Homepage: http://srbiau.ac.ir/faculties/panahi

- **Division**
  Department of Environmental Economics  
  Department of Energy Economics

- **Teaching interests**
  Environmental valuation  
  Environmental economics  
  Ecosystem assessment; goods and services  
  Environmental and natural recourses policies and management

- **Research interests**
  Environmental economics  
  Environmental valuation  
  Ecosystem assessment; goods and services  
  Environmental and natural recourses policies  
  Biodiversity resources

- **Membership in scientific associations**
  Roster of Experts in Convention on Biological Diversity (CBD)  
  Group de Recherché sur l' Environnement et de la Gouvernance (GREG)
Naser Moharamnejad
Assistant Professor

- **Ph.D.** Environmental Management, Islamic Azad University, Science and Research Branch, Tehran, Iran, 1996.
- **M.Sc.** Chemical Engineering, Sharif University of Technology, Tehran, Iran, 1979.
- **B.Sc.** Chemistry, University of Tehran, Tehran, Iran, 1969.

Department of Environmental Education,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 115 7723
Fax: +9821 4486 5399

E-mail: moharamnejad@gmail.com
Homepage: www.emg.ir

- **Division**
  Department of Environmental Education

- **Teaching interests**
  Sustainable development
  Environmental chemistry
  Environmental management
  Advanced environmental management

- **Research interests**
  Green productivity
  Pollution management
  Environmental management
  Strategic environmental assessment
  Environmental management in urban development

- **Membership in Scientific Associations**
  Iranian Society of Environmentalists (IRSEN)
Alireza Vafaeinejad
Assistant Professor

- **Ph.D.** GIS Engineering, KNT University, Tehran, Iran. 2009
- **M.Sc.** GIS Engineering, KNT University, Tehran, Iran. 2002
- **B.Sc.** Surveying Engineering, KNT University, Tehran, Iran. 2002

Department of Remote Sensing and GIS
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 287 5986
Fax: +9821 4486 9443

E-mail: a_vafaei@srbiau.ac.ir

- **Division**
  Department of Remote Sensing and GIS

- **Teaching interests**
  Spatio-Temporal GIS
  Enterprise GIS
  Mobile GIS
  Web GIS
  Urban GIS

- **Research interests**
  Using Optimization Methods in GIS
  Spatial Web Service
  Applied GIS
  Navigation and Way Finding
  Digital Mapping and Virtual Reality

- **Membership in Scientific Associations**
  Editorial Board- Journal of Environmental Management and Planning
Aida Biati

Assistant Professor

- **Ph.D.** Environmental Science, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2011
- **M.Sc.** Environmental Science, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2006.
- **B.Sc.** Natural Resources Engineering-Environment, Islamic Azad University, Ahvaz Branch, Ahvaz, Iran, 2003.

Department of Environmental Pollution, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 377 7164
Fax: +9821 4486 9443

E-mail: bayati_id@yahoo.com
Homepage: http://srbiau.ac.ir/faculties/bayati

- **Division**
  Department of Environmental Pollution

- **Teaching interests**
  Water resources pollution,
  Sediments Geochemistry,
  Solid waste management,
  Advanced Environmental Pollution
  Site selection and landfill design

- **Research interests**
  Environmental Pollution (Water, Air, Soil and Solid wastes)
  Sediments Geochemistry
  Energy and Environment

- **Membership in scientific associations**
  Iranian Society of Environmentalists (IRSEN)
  Agricultural and Natural Resources Engineering Organization
Zahra Abedi
Assistant Professor

- **Ph.D.** Economic Sciences, Islamic Azad University, Science and Research Branch, Tehran, Iran, 1994.
- **M.Sc.** Economic Sciences, Shahid Beheshti University, Tehran, Iran, 1988.
- **B.Sc.** Economic Sciences, Shiraz University, Shiraz, Iran, 1978.

Department of Energy Economics,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 390 5928
Fax: +9821 22291752

E-mail: abediniz@yahoo.com

- **Division**
  Department of Energy Economics

- **Teaching interests**
  - Environmental economic
  - Energy modeling and planning
  - Optimization of economic systems
  - Economic development and planning
  - Economic evaluation of natural and environmental resources

- **Research interests**
  - Green accounting
  - Sustainable development
  - Energy planning and modeling
  - Evaluation of natural and environmental resources

- **Membership in Scientific Associations**
  - Economic Association
  - Iranian Society of Environmentalists (IRSEN)
  - Railway Transport Association
Hamidreza Ghaffarzadeh
Assistant Professor

- **M.Sc.** Economics, University of Essex, Essex, UK, 1976
- **B.Sc.** Economics, University of Tehran, Tehran Iran, 1990.

Department of Environmental Economics, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 3715908  
Fax: +9821 4486 9443

E-mail: hamid.ghaffarzadeh@gmail.com  

**Division**

Department of Environmental Economics

**Teaching interests**

Environmental Economics  
Sustainable Development  
Disaster Management  
Macro Economics

**Research interests**

Environmental economics  
Biodiversity resources  
English Language: Specialized Course

**Membership in scientific associations**

Environmental Specialist
Farideh Atabi
Assistant professor

- **Ph.D.** Environmental Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2001.
- **M.Sc.** Environmental Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 1997.
- **B.Sc.** Mechanical Engineering, Science and Technology University of Iran, Tehran, Iran, 1986.

Department of Environmental Engineering, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 134 1702
Fax: +9821 4486 9443

E-mail: far-atabi@jamejam.net
Homepage: [http://www.srbiau.ac.ir/faculties/atabi](http://www.srbiau.ac.ir/faculties/atabi)

- **Division**
  Department of Environmental Engineering – Air Pollution

- **Teaching interests**
  Air Pollution Modeling
  Energy and the Environment
  Air Pollution, (Origin and Control)
  Renewable Energies and the Environment

- **Research interests**
  Renewable Energy
  Air Pollution Modeling
  Energy and the Environment
  Energy Efficiency and Conservation
  Energy Economics and Environmental Economics

- **Membership in Scientific Associations**
  Iranian Society of Environmentalists (IRSEN)
  Iran Energy Association (IEA)
  Iranian Association for Energy Economics (IRAEE)
  Iranian Solar Energy Society (IRSES)
  Iranian Mechanical Engineering Society
Farzam Babaei
Assistant Professor

- **Ph.D.** Environmental Management, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2011
- **M.Sc.** Environmental Science, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2004.
- **B.Sc.** Biology, Islamic Azad University, North Tehran Branch, Tehran, Iran, 1999.

Department of Environmental Education, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 530 6736
Fax: +9821 4486 9443

E-mail: farzam.babaie@gmail.com
Homepage: http://srbiau.ac.ir/faculties/babaie

- **Division**
  Department of Environmental Education

- **Teaching interests**
  Environmental Education
  Environmental Management

- **Research interests**
  Environmental Pollutions
  Water and Groundwater Pollution
  Environmental Education
  Environmental Management

- **Membership in Scientific associations**
  Iranian Society of Environmentalists (IRSEN)
Ali Mohammadi

Assistant Professor

• Ph.D. Environmental Management, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2011
• B.Sc. Mechanical Engineering, University of Sacramento, Sacramento, California, USA

Department of Environmental Management, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 612 6761
Fax: +9821 4486 9443

E-mail: ali.mohammadi1964@gmail.com
Homepage: http://srbiau.ac.ir/faculties/mohammadi

• Division
  Department of Environmental Management

• Teaching interests
  Environmental Planning and Management
  Principles of Environmental Planning
  English Language: Specialized Course

• Research interests
  Environment and Energy Planning and Management
  Energy Management
  Energy and Environment

• Membership in scientific associations
  Iranian Society of Environmentalists (IRSEN)
Hooman Farzaneh
Assistant Professor

B.Sc.  Chemical Engineering, Islamic Azad University, North Tehran Branch, Tehran, Iran, 1998.

Department of Energy Engineering, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran
Tel.: +98932 937 2944
Fax: +9821 4486 5047
E-mail: Info@hfarzaneh.com
Homepage: www.hfarzaneh.com

Division
Department of Energy Engineering – Modeling

Teaching interests
Energy modeling
Process engineering
Energy management in industries
Energy management and auditing workshop

Research interests
Heat recovery system design
Energy management in industries
Energy system modeling and simulation
Fuel management in transportation sector

Membership in Scientific Associations
Solar Energy Association
Parvin Farshchi
Assistant Professor

- **M.Sc.** Marine Science, Meerut University, Meerut, India, 1987.
- **B.Sc.** Science, Meerut University, Meerut, India, 1985.

Department of Environmental Pollution, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 148 7746
Fax: +9891 4486 5005

E-mail: parvinfarshshi@gmail.com
Homepage: http://www.srbiau.ac.ir/faculties/farshchi

- **Division**
  Department of Environmental Pollution

- **Teaching interests**
  Marine Pollution
  Marine Ecosystem
  Coastal Management
  ESP in Environmental Studies

- **Research interests**
  Coastal Management
  Environmental Pollution
  Environmental Governance
  International and Regional Environmental Cooperation and Management

- **Membership in Scientific Associations**
  Life Member and Fellow of the Society of Biosciences, India
  Life Member of the Indian Fisheries Association
  Fishery Technologists Society of India
  Life Member of the Society of Ocean Scientists and Technologists of India
  Marine Biological Association of India
  Iranian Society of Environmentalists (IRSEN)
Seyed Alireza Mirzahosseini

Assistant Professor

- **Ph.D.** Environmental Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2012
- **M.Sc.** Environmental Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2006.
- **B.Sc.** Occupational Health, Shahid Beheshti University, Tehran, Iran, 2003.

Department of Environmental Engineering, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 339 0855
Fax: +9821-4486 9443

E-mail: mirzahosseini@gmail.com
Homepage: http://www.hset.ir

- **Division**
  Department of Environmental Engineering – Air Pollution

- **Teaching interests**
  - Fundamentals of Occupational Health
  - Principles of Industrial Safety
  - Risk Management and Job Safety
  - Computer programming
  - Air Pollution Sampling Methods
  - Environmental Management

- **Research interests**
  - Air Pollution
  - HSE Management
  - Renewable Energies (Photovoltaic)
  - Remote Sensing and GIS
  - Solid Waste

- **Membership in scientific associations**
  - Iranian Society of Environmentalists (IRSEN)
  - Iranian Solar Energy Scientific Society
  - Agricultural and Natural Resources Engineering Organization
Mohammad Reza Miri Lavasani
Assistant Professor

- **Ph.D.** Quantitative risk management of offshore structure
  Liverpool John Moores University, Liverpool, UK 2010.
- **M.Sc.** Offshore structural Engineering, Liverpool John Moores University, Liverpool, UK 2007.
- **B.Sc.** Civil Engineering, Islamic Azad University, South Tehran Branch
  Tehran, Iran, 2003

Department of HSE Management,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 144 0867
Fax: +9821 4486 9443

E-mail: lavasani@saff-rosemond.com
Homepage: http://srbiau.ac.ir/faculties/lavasani

- **Division**
  Department of HSE Management

- **Teaching interests**
  Risk management and job safety analysis
  Reliability engineering
  Crisis management
  Risk Assessment
  Statistical Mathematics
  Advanced Engineering Mathematics
  Offshore Engineering
  Offshore Drilling

- **Research interests**
  Safety, Health and Environmental Management System
  Application of Statistics in HSE
  Crisis management
  Risk and Reliability Assessment of Offshore System
  Decision Making Studies in Oil and Gas Systems

- **Membership in scientific associations**
  The Institute of Marine Engineering, Science & Technology (IMarEST)
Mahdi Ramezani

Assistant Professor

- **Ph.D.** Natural Resources Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2011
- **M.Sc.** Natural Resources Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2006.
- **B.Sc.** Natural Resources Engineering, Islamic Azad University, North Tehran Branch, Tehran, Iran, 2003.

Department of Biodiversity, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 483 3780  
Fax: +9821-4486 9443

E-mail: engramezani59@yahoo.com  
Homepage: http://srbiau.ac.ir/faculties/ramezani

- **Division**
  
  Department of Biodiversity

- **Teaching interests**
  
  Ecology  
  GIS  
  Plant Cartography

- **Research interests**
  
  Natural Resources  
  Environmental Pollution

- **Membership in scientific associations**
  
  Agricultural and Natural Resources Engineering Organization  
  Iranian National Elites Foundation
Lobat Taghavi

Assistant Professor

- **Ph.D.** Environmental Pollution, Institute National Polytechnique de Toulouse (INPT), France, 2010.
- **M.Sc.** Environmental Science, Islamic Azad University, Science and Research Branch, Ahvaz, Iran, 2006.
- **B.Sc.** Natural Resources Engineering-Environment, Islamic Azad University, Ahvaz Branch, Ahvaz, Iran, 2003.

Department of Environmental Education, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912-8077579
Fax: +9821-4486 9443

E-mail: taghavi_lobat@yahoo.com
Homepage: http://srbiau.ac.ir/faculties/taghavi

- **Division**
  Department of Environmental Education

- **Teaching interests**
  Environmental Science
  Environmental Pollution
  Research Methodology
  Sustainable Development and Environment
  Aquatic and Terrestrial Ecosystems

- **Research interests**
  Environmental Pollutions
  Environmental Baseline Study
  Environmental Impact Assessment (EIA)
  Marine Pollution
  Water and Groundwater Pollution
  Waste Management

- **Membership in scientific associations**
  Iranian Society of Environmentalists (IRSEN)
Seyed Abbas Pourhashemi

Assistant professor

- **Ph.D.**  Environmental International Law, Université Robert Schuman, Strasbourg, Alsace, France, 2005.
- **M.Sc.**  International Law, Nancy-Université, Lorraine, France, 2002
- **B.Sc.**  Political Science, Iran, 1999.

Department of Environmental Law,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +9821-4486 7177
Fax: +9821-4486 9443

E-mail: ahashemy@yahoo.com
Homepage: [http://www.srbiau.ac.ir/faculties/pourhashemi](http://www.srbiau.ac.ir/faculties/pourhashemi)

- **Division**
  Department of Environmental Law

- **Teaching interests**
  International Environmental Law
  Public International Law
  Planning Acts and Environmental Policies
  Environmental Ethics

- **Research interests**

- **Membership in Scientific Associations**
  Scientific Council at the University
  Iranian Judiciary Bar
  International Bar Association
Babak Naeimi
Assistant Professor

- **Ph.D.**  Spatial ecology and Biogeography, University of Twente, The Netherlands, 2013
- **M.Sc.**  GIS & Remote Sensing, KNT University, Tehran, Iran, 2000
- **B.Sc.**  Natural Resources: Rangeland & Watershed Management, Gorgan University of Agricultural Sciences and Natural Resources, Gorgan, Iran. 1998

Department of Remote Sensing and GIS,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 315 7504
Fax: +9821 4486 9443

E-mail: naimi@itc.nl
Homepage: http://r-gis.net/?q=naimi

- **Division**
  Department of Remote Sensing and GIS

- **Teaching interests**
  Geographic Information Systems Principles
  Spatial Analysis using Geographic Information System

- **Research interests**
  Spatio-temporal statistics
  Spatial ecology and biogeography; species distribution modeling
  Climate Change and its consequence on ecological systems
  Open-source software development
Abtin Ataei
Assistant Professor

- **Ph.D.** Energy Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2008.
- **M.Sc.** Energy Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2002.
- **B.Sc.** Applied Physics, Isfahan University of Technology Isfahan, Iran, 1997.

Department of Energy Engineering, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 438 3885
Fax: +9821 44465383

E-mail: a-ataei@hotmail.com
Homepage: http://srbiau.ac.ir/faculties/ataei

- **Division**
  Department of Energy System – Energy Technologies

- **Teaching interests**
  Energy Systems Analysis
  Advanced Pinch Technology
  Advanced Energy Analysis
  Heat and Mass Transfer
  Energy Saving in industries

- **Research interests**
  Process Integration Using Pinch and Exergy Analysis
  Combined Thermal and Water Pinch Analysis
  Combined Heat and Power Analysis

- **Membership in scientific associations**
  National Energy Committee of Iran
  Iranian Energy Society
  Iranian Environmentalist Society
  Islamic Azad University Graduate Society
  Isfahan University of Technology Graduate Society
Farhad Dabiri
Instructor

- **M.Sc.** Criminal Law, Shahid Beheshti University, Tehran, Iran, 1974.
- **B.Sc.** Juridical Law, Shahid Beheshti University, Tehran, Iran, 1971.

Department of Environmental Law, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 527 2609
Fax: +9821 8857 9078

E-mail: fara_dabiri@yahoo.com
Homepage: [http://www.srbiau.ac.ir/faculties/dabiri](http://www.srbiau.ac.ir/faculties/dabiri)

- **Division**
  Department of Environmental Law

- **Teaching interests**
  Environmental laws
  National criminal law
  Environmental organizations

- **Research interests**
  Environmental laws
  Environmental organizations
  Biodiversity and natural resources law

- **Membership in Scientific Associations**
  Iranian Society of Environmentalists (IRSEN)
  Centre for Peace and Environment
  Environmental Law Association of Iran (ELAI)
  Environmental and Tourism Committees of Research and Planning Centre
Hossein Moosavi Fatemi
Instructor

- **M.Sc.** Environmental Design Engineering, University of Tehran, 1998
- **B.Sc.** Horticultural Engineering, University of Tabriz, 1993

Department of Environmental Design, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +9821 4491 2230
Fax: +9821 4491 2230

E-mail: hosseinfatemi@srbiau.ac.ir
Homepage: http://srbiau.ac.ir/faculties/fatemi

- **Division**
  Department of Environmental Design

- **Teaching interests**
  Perceiving, Perception and Drawing Studio
  Principles of Environmental Design Engineering
  Environment and Landscape Design Techniques
  Environmental Design Studio (I and II)

- **Research interests**
  Landscape Design and Land Art
  Sustainable Design Ecotourism Development
  Cultural Landscape Design
  Theme Parks Design

- **Membership in scientific associations**
  Iran Society Landscape Architects (ISLAP)
Mohammad Reza Moghadam
Assistant Professor

- **M.Sc.** Energy Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2000
- **B.Sc.** Chemistry, University of Tehran, Iran, 1977.

Department of Energy Systems,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 239 5365
Fax: +9821 6611 31 88

E-mail: mr_moghaddam@yahoo.com

- **Division**
  Department of Energy Systems – Energy Technologies

- **Teaching interests**
  Economics and Natural Resources
  Management and Energy Economics
  Renewable Energies Economics

- **Research interests**
  Oil and Gas Reserves
  Energy Systems Design
  Energy Value

- **Membership in scientific associations**
  Board of Directors of NIOC
  Board of Iran Continent Oil Company
  Board of Directors of National Iranian Oil Regions
Mohammadreza Tabesh

Assistant Professor

- **Ph.D.** Natural Resources Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2006
- **M.Sc.** Natural Resources, University of Tehran, Tehran, Iran, 2002.
- **B.Sc.** Natural Resources, University of Tehran, Tehran, Iran, 2000.

Department of Biodiversity,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 115 7509
Fax: +9821 4486 9443

E-mail: tabesh.mr@gmail.com
Homepage: http://srbiau.ac.ir/faculties/tabesh

- **Division**
  Department of Biodiversity
- **Teaching interests**
  Sustainable development in Environmental law
  Environmental Science
  Natural Resources
  Forestry
- **Research interests**
  Natural Resources
  Forestry
Mohammad Bagher Sadough

Assistant Professor

- **Ph.D.** Environmental Science, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2000.
- **M.Sc.** Environmental Science, Islamic Azad University, Science and Research Branch, Tehran, Iran, 1994.
- **B.Sc.** in Chemistry, Tabriz University, Tabriz, Iran, 1977.

Department of Environmental Pollution
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 145 8263
Fax: +9821 4486 9443

E-mail: sadough@srbiau.ac.ir
Homepage: http://srbiau.ac.ir/faculties/sadough

- **Division**
  Department of Environmental Pollution

- **Teaching interests**
  - An Introduction to the Environment
  - Ecology
  - Advanced Energy Analysis
  - Solid Waste disposal

- **Research interests**
  Environmental Pollution

- **Membership in scientific associations**
  - Iranian Association for Environmental Assessment
  - Chemistry and Environmental Chemistry Society
  - Iranian Society of Environmentalists (IRSEN)
  - Agricultural and Natural Resources Engineering Organization
Borhan Riazi
Assistant Professor

- **Ph.D.** Environmental Management, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2001.
- **M.Sc.** Environmental Studies, Shahid Beheshti University, Tehran, Iran, 1985.
- **B.Sc.** Natural Resources, Tehran University, Tehran, Iran, 1970.

Department of Biodiversity, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 326 0972
Fax: +9821 6648 0419

E-mail: briazi@pmz.ir
Homepage: http://srbiau.ac.ir/faculties/riazi

- **Division**
  Department of Biodiversity

- **Teaching interests**
  - Protected areas
  - Wetlands management
  - Terrestrial and aquatic ecosystems
  - Natural and biological geography of Iran
  - Land (Environment) ecological evaluation

- **Research interests**
  - Protected areas
  - Wetlands management
  - Terrestrial and aquatic ecosystems
  - Natural and biological geography of Iran
  - Land (Environment) ecological evaluation

- **Membership in Scientific Associations**
  - Iranian Society of Environmentalists (IRSEN)
  - Iranian Society of Watershed Management
Mir Masoud Kheirkhah Zarkesh
Assistant Professor

- **Ph.D.**  Water Resources (Geo-Information Technology), Wageningen University, Wageningen, The Netherlands, 2004.
- **M.Sc.**  Water Resources(Geo-Information Technology), ITC University, Enschede, The Netherlands, 1997.
- **B.Sc.**  Hydraulic and Irrigation, Tabriz University, Tabriz, Iran, 1991.

Department of Remote Sensing and GIS,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 500 5573
Fax: +9821 4490 5709

E-mail: kheirkhah@itc.nl
Homepage: http://srbiau.ac.ir/faculties/kheirkhah

- **Division**
  Department of Remote Sensing and GIS

- **Teaching interests**
  GIS, DSS
  Remote Sensing
  Water resources
  Research methodology
  Soil and water resources
  Geo-information technology

- **Research interests**
  Soil and water aspects
  Site selection using new methods
  Information technology and land use planning
  Application of RS and GIS and DSS on earth science

- **Membership in Scientific Associations**
  Iranian Watershed Management Institute
  Iranian Water Resources Institute
  Iranian Hydraulic Association
Tooraj Dana
Assistant Professor

- **Ph.D.** Environmental Management, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2011
- **M.Sc.** Agricultural Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 1997
- **B.Sc.** Agricultural Engineering, Islamic Azad University, Noshahr Branch, Noshahr, Iran, 1990.

Department of HSE Management, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 501 1036
Fax: +9821 4486 9443

E-mail: tooraj_da@yahoo.com
Homepage: http://srbiau.ac.ir/faculties/dana

- **Division**
  Department of HSE Management

- **Teaching interests**
  HSE Research Methodology
  HSE Regulations and Standards
  Management Advanced Theories
  Crisis Management

- **Research interests**
  HSE Management in Oil and Gas Industries
  Risk Management
  Environmental Management
  Air Pollution and Traffik Management

- **Membership in scientific associations**
  Agricultural and Natural Resources Engineering Organization
  Iranian Society of Environmentalists (IRSEN)
Bahram Aminipouri
Assistant Professor

- **M.Sc.** Engineering Hydrology, Newcastle Upon Tyne University, Newcastle Upon Tyne, England 1987.
- **B.Sc.** Irrigation Engineering, Shahid Chamran (Jundishapour) University, Ahwaz, Iran, 1978.

Department of Remote Sensing and GIS, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 516 4073
Fax: +9821 4486 5010

E-mail: baminipouri@gmail.com
Homepage: http://www.tums.ac.ir/faculties/aminipouri

- **Division**
  Department of Remote Sensing and GIS

- **Teaching interests**
  Applied and Advanced Engineering Hydrology
  Hydraulic Engineering
  Fluid Mechanic
  Irrigation Engineering

- **Research interests**
  Applied and Advanced Engineering Hydrology
  Hydraulic Engineering
  Fluid Mechanic
  Irrigation Engineering

- **Membership in Scientific Associations**
  Iranian Hydraulic Association
Khosrow Bakhtari
Assistant Professor

- B.Sc.  Mechanical Engineering, University of Tabriz, Iran, 1975.

Department of Energy Systems,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 3493604
Fax: +9821 4486 9443

E-mail: bakhtari@ut.ac.ir
Homepage: http://srbiau.ac.ir/faculties/bakhtari

- Division
  Department of Energy Systems – Energy Technologies

- Teaching interests
  Energy Systems Design
  Thermal, Solar, Hydrogen Power Plants Technologies
  Electrical Energy Distribution Systems

- Research interests
  Hydropower plant development
  Hydro-electric energy

- Membership in scientific associations
  Member of Technical Committee for design of Dam and Hydrology Projects
  Associate Member of the Institute of Energy, UK
  National Scientific Council of Iran
  Energy Commission
Dariush Karimi
Assistant Professor

- **Ph.D.** Natural Resources Law, Universiti Putra Malaysia (UPM) Malaysia, 2001
- **M.Sc.** International Law, University of Tehran, Iran, 1991
- **B.Sc.** Political Law, University of Tehran, Iran, 1987

Department of Environmental Law,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 4247580
Fax: +9821 4486 9443

E-mail: dkaimi1@gmail.com

- **Division**
  Department of Environmental Law

- **Teaching interests**
  Natural Resources Law
  Principles of Sustainable Development in Law
  National Organizations Responsible for Environmental Protection
  International Organizations Responsible for Environmental Protection
  Administrative law

- **Research interests**
  Environmental Law
  Energy Law

- **Membership in scientific associations**
  Iranian Society of Environmentalists (IRSEN)
  Scientific Fisheries Association
  Iranian Organic Agricultural Society
  Center for Peace and Environment
Abdulreza Karbassi

Assistant Professor

- **Ph.D.** Science (Physics, mathematics, geology), Mysore University, India, 1982.
- **M.Sc.** Environmental Geochemistry, Mangalore University, India, 1984.
- **B.Sc.** Marine Environmental Geochemistry, Mangalore University, India, 1989.

Department of Environmental Pollution, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 239 5365
Fax: +9821 6611 31 88

E-mail: akarbasi@ut.ac.ir

- **Division**
  Department of Environmental Pollution

- **Teaching interests**
  - Energy & environment
  - Energy Auditing & Measurement
  - Marine Pollution

- **Research interests**
  - Oil and trace metal pollutions
  - Environmental geochemistry
  - Ozone depleting substances
  - Limnology
  - Energy & environment
  - Solid waste management
  - Thermal Pollution in marine environment

- **Membership in scientific associations**
  - The Association of Geoscientists for International Development (AGID)
  - New York Academy of Science
  - International Solid Waste Association (ISWA)
Jamal Ghoddousi
Assistant Professor

- **Ph.D.** Natural Resources Sciences and Engineering, University of Tehran, 2002.
- **M.Sc.** Hydrology - Natural Resources and Environment, The University of Arizona, USA, 1976.
- **B.Sc.** Forestry, University of Tehran, Iran, 1969.

Department of Environmental Pollution, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 1864292  
Fax: +9821 4486 9443

E-mail: jamal_go@yahoo.com  

- **Division**
  Department of Environmental Pollution

- **Teaching interests**
  Modeling and Simulation in Environmental Management  
  Modeling and Simulation in Environmental Engineering  
  Research Methodology  
  Statistics in HSE Management

- **Research interests**
  Natural resources management  
  Water resource development  
  Environmental protection and improvement  
  Soil and Water conservation

- **Membership in scientific associations**
  International Rainwater Catchment Systems Association (IRCSA)  
  Iranian Rainwater Catchment Systems Association  
  Watershed Management Society of Iran  
  Soil Science Society of Iran  
  Remote Sensing and GIS Society
Mansour Pournouri
Assistant Professor

- **Ph.D.** International Law of the Sea, University of Dundee, UK, 1991
- **M.Sc.** International Law, Hull University, UK, 1988
- **B.Sc.** Judiciary Law, University of Tehran, 1976

Department of Environmental Law,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +98912 324 0957
Fax: +9821 4491 2230

E-mail: pournouri@yahoo.com
Homepage: http://srbiau.ac.ir/faculties/pournouri

- **Division**
  Department of Environmental Law

- **Teaching interests**
  Public International Law
  Law of the Sea and International Law
  Civil Liabilities and Environmental Damages
  State Responsibility against Environmental Damage
  Law of Treaties

- **Research interests**
  Law of the Sea and International Law
  State Responsibility against Environmental Damage

- **Membership in scientific associations**
  Research Commission of the Judiciary
  Iranian National Center for Oceanography
  Association of Official Translators to the Judiciary
Seyed Mohammadreza Heibati
Assistant Professor

- **Ph.D.**  Energy Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2011
- **M.Sc.**  Energy Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2006
- **B.Sc.**  Mechanical Engineering, Islamic Azad University, South Tehran Branch, Tehran, Iran, 2001

Department of Energy Engineering,
Graduate School of the Environment and Energy,
Science and Research Branch, IAU,
Tehran, Iran

Tel.: +9821 22469246
Fax: +9821 76281669

E-mail: mrheibati@srbiau.ac.ir
Homepage: [http://iausrb.academia.edu/SMohammadrezaheibati](http://iausrb.academia.edu/SMohammadrezaheibati)

- **Division**
  Department of Energy System – Energy Technologies

- **Teaching interests**

- **Research interests**
  Building Energy Simulation
  Building Elements Simulation
  Building Energy Systems Modeling
  Building Energy- Economic Optimization
  Integrated Energy Elements Modeling for Optimized Building
  Energy Simulation for Designing a Zero Net Energy Building or Green Building

- **Membership in scientific associations**
  Membership of Iran Association for Energy Economics (IAEE)
  Membership of Ministry of Energy-Iran Energy Efficiency Organization-Energy Friends Group
  Membership of Organization for Engineering Order of Building- Tehran
  Membership and Inspector of Iran Energy Association (IEA)
Hossein Ghadamian
Assistant professor

- **Ph.D.** Energy Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 2002.
- **M.Sc.** Energy Engineering, Islamic Azad University, Science and Research Branch, Tehran, Iran, 1998.
- **B.Sc.** Mechanical Engineering, Tabriz University, Tabriz, Iran, 1995.

Department of Energy Engineering, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 254 1353
Fax: +9821 4486 5320

E-mail: hghadamian@yahoo.com
Homepage: http://www.srbiau.ac.ir/faculties/ghadamian

- **Division**
  Department of Energy Engineering – Energy Technologies

- **Teaching interests**
  - Energy systems analysis
  - Energy audit and management
  - Advanced gas turbine systems
  - Direct energy conversion systems
  - Advanced mathematical programming

- **Research interests**
  - Gas turbines off-design and diagnostics
  - Fuel cells systems modeling and optimizations
  - Energy systems analysis and integration by NLP modeling

- **Membership in Scientific Associations**
  - U.S. Electrochemistry Association
  - Tabriz University Association
  - Iranian Mechanical Engineering Association
  - Iranian Electronic Committee
Abdul Razaq Kaabi-nejadian

Assistant Professor

- **Ph.D.**  Solar Energy, Kogakun University, Japan, 1988
- **M.Sc.**  Mechanical Engineering, Keio University, Japan, 1983
- **B.Sc.**  Mechanical Engineering, Amirkabir University of Technology Iran, 1970

Department of Energy Systems Engineering, Graduate School of the Environment and Energy, Science and Research Branch, IAU, Tehran, Iran

Tel.: +98912 122 6223
Fax: +9821 4486 9443

E-mail: kaabi@iranenergy.org.ir

- **Division**
  Department of Energy Systems Engineering - Energy Technologies

- **Teaching interests**
  - Renewable Energy
  - Heat Storage Technology
  - Energy Efficiency
  - Energy Laboratory
  - Energy Applied in Industry
  - Air Conditioning System

- **Research interests**
  - Solar Energy
  - Solar Energy Storage
  - Air Conditioning System
  - Renewable Energy

- **Membership in scientific associations**
  - Head of Iranian Society of Heating, Refrigeration and Air Conditioning Engineers
  - Solar Energy Committee Member of World Renewable Energy Congress
  - International Scientific Committee Member of International Building Physics Conference

Pioneers for 2012 - World Renewable Energy Congress, Denver, Colorado, USA
Order of the Rising Sun Medal from Japanese Imperial Majesty the Emperor
Center for Environment and Energy Research and Studies (CEERS) founded in 2000. CEERS continued its academic heritage by undertaking and promotion innovative research topics and scientific studies in accordance with the contemporary social demand and scientific needs. Thus, the Center for Environmental and Energy Research and Studies, is established in order to pursue and enhance the research and study activities in professional framework.

Currently, this center has incorporated the most sophisticated research and studies, advanced measuring equipment and state of the energy engineering with the most experienced experts under one roof. As a result, it has successfully completed numerous applied and baseline projects and has presented itself as one of the leading contenders in this endeavor.

CEERS Provides engineering, consulting, management, implementation, sample analysis, measurement, control and training in different issues in the fields of Environment and Energy.

CEERS staffs are a combination of experts and university faculties and professors with great knowledge in their respective fields and are giving professional services in this regard and are so active at the national, regional, and global science and research issues.
- Air Pollution
- Noise Pollution
- Water and Waste water
- Solid Waste
- Ocean and Marine Environment
- Remote Sensing (RS) and GIS
- Biodiversity
- Wetlands
- Forest and Grassland
- Ecotourism
- Landscape and Green Space
- Wildlife Management
- Environmental Impact Assessment (EIA)
- HSE, IMS, ISO
- Land Use Planning
- Environmental Law
- Environmental Economics
- Energy Efficiency
- Renewable Energy Technology
- Non-renewable Energy Technology
- Energy Auditing
- Energy Economics
- Energy Policy
CEERS ORGANIZATION CHART

President of CEERS

Consultants

Secretariat

Computer Center

Laboratories

Library & Archive

GIS Manager

Environmental Engineering

Air Pollution

Noise Pollution

Water & Wastewater

Solid Waste

Ocean & Marine Environment

Environmental Science

Biodiversity

Wetlands

Forest & Grassland

Ecotourism

Landscape & Green Space

Wild Life

Environmental Management

Environmental Impact Assessment

HSE, IMS, ISO

Land Use Planning

Environmental Law

Environmental Economics

Energy

Renewable Energy Tech.

Non-Renewable Energy Tech.

Energy Efficiency

Energy Economics

Energy Policy

Energy Auditing
International Journal of Environmental Science and Technology (IJEST)

Editor-in-Chief: Jafar Nouri

International Journal of Environmental Science and Technology (IJEST) is an international scholarly refereed research journal which aims to promote the theory and practice of environmental science and technology, innovation, engineering and management. A broad outline of the journal’s scope includes: peer reviewed original research articles, case and technical reports, reviews and analysis papers, short communications and note to the editor, in interdisciplinary information on the practice and status of research in environmental science and technology, both natural and man-made. The main aspects of research areas include, but are not exclusive to, environmental chemistry and biology; environments pollution control and abatement technology; transport and fate of pollutants in the environment; concentrations and dispersion of wastes in air; water and soil, point and non-point sources pollution; heavy metals and organic compounds in the environment; atmospheric pollutants and trace gases; solid and hazardous waste management; soil biodegradation and bioremediation of contaminated sites; environmental impact assessment; industrial ecology; ecological and human risk assessment; improved energy management and auditing efficiency; and environmental standards and criteria. This journal is member of the Committee on Publication ethics (COPE) and subscribes its principles on how to deal with acts of misconduct.

Impact Factor: 1.844 (2012), Journal Citation Reports*, Thomson Reuters

Electronic access

http://springer.com/13762
www.IJEST.org

Subscription information

http://Springer.com/librarians
T. Y. Wu, School of Engineering, Sunway campus, Monash University, Jalan Lagoon Selatan, Bandar Sunway, 46150, Selangor Darul Ehsan, Malaysia

M. Yassin, Department of Environmental Technology Management, College for Women, P.O. Box 5969 Safat 13060, Kuwait

T. Yigitcanlar, Department of Civil Engineering and Built Environment, Science and Engineering Faculty, Queensland University of Technology, Brisbane Queensland 4001 Australia

X. Z. Yu, Department of Environmental Sciences & Engineering, Hunan Agricultural University, Changsha, 410128, Hunan, China

EDITORIAL BOARD
N. T. Abdel-Ghani, Chemistry Department, Faculty of Science Cairo University, Egypt

T. Chirenje, School of Natural Sciences and Mathematics, Stockton College, 101 Vera King Farris Drive Galloway, NJ 08205-9441, USA

G. N. Demirer, Middle East Technical University, Department of Environmental Engineering, Inonu Bulvari, 06531 Ankara, Turkey

C. Diamantini, School of Environmental Engineering, Faculty of Engineering, University of Trento, Via Mesiano 77, I - 38123 Trento, Italy

J. V. Hall, Institute of Economic and Environmental Studies, California State University, 800 N. State College Blvd., Fullerton CA 92834, USA

D. F. Juang, Department of Health Business Administration, Meiho University, 23, Pingguang Rd., Neipu, Pingtung 91202, Taiwan, (R.O.C.)

V. Motevalli, Mechanical Engineering Technology, Purdue University, Knoy Hall of Technology, 401 N. Grant Street, West Lafayette, IN 47907-2021, USA

A. Oskouie, Department of Chemical and Environmental Engineering, Illinois Institute of Technology and Metropolitan Water Reclamation District of Greater Chicago, Illinois, USA

H. S. Park, Department of Civil and Environmental Engineering, College of Engineering, University of Ulsan, 102 Dehakro, Ulsan,680-749, Republic of Korea

R. Prezant, College of Science and Mathematics, College of Science and Mathematics, Montclair State University, Montclair, New Jersey, 07043, USA

M. Rahmatian, Department of Economics, Mihaylo College of Business and Economics, California State University, Fullerton, California 92834, USA

M. E. T. Sillanpaa, Department of Environmental Sciences, Laboratory of Applied Environmental Chemistry, University of Kuopio, Patteristonkatu 1 FI- 50100 Mikkeli, Finland

J. Y. Wang, School of Civil and Environmental Engineering, Nanyang Technological University, Singapore

C. Wu, Department of Geography, University of Wisconsin-Milwaukee, Bolton Hall 482, P.O. Box 413, Milwaukee, WI, USA

V. Zambare, School of Mines and Technology, South Dakota School of Mines and Technology, USA

P. Zannetti, EnviroComp Consulting, Inc., 2298 Ocaso Camino Fremont, CA 94539, USA