



# IUT INTERNATIONAL E-NEWSLETTER

A window to international activities of IUT

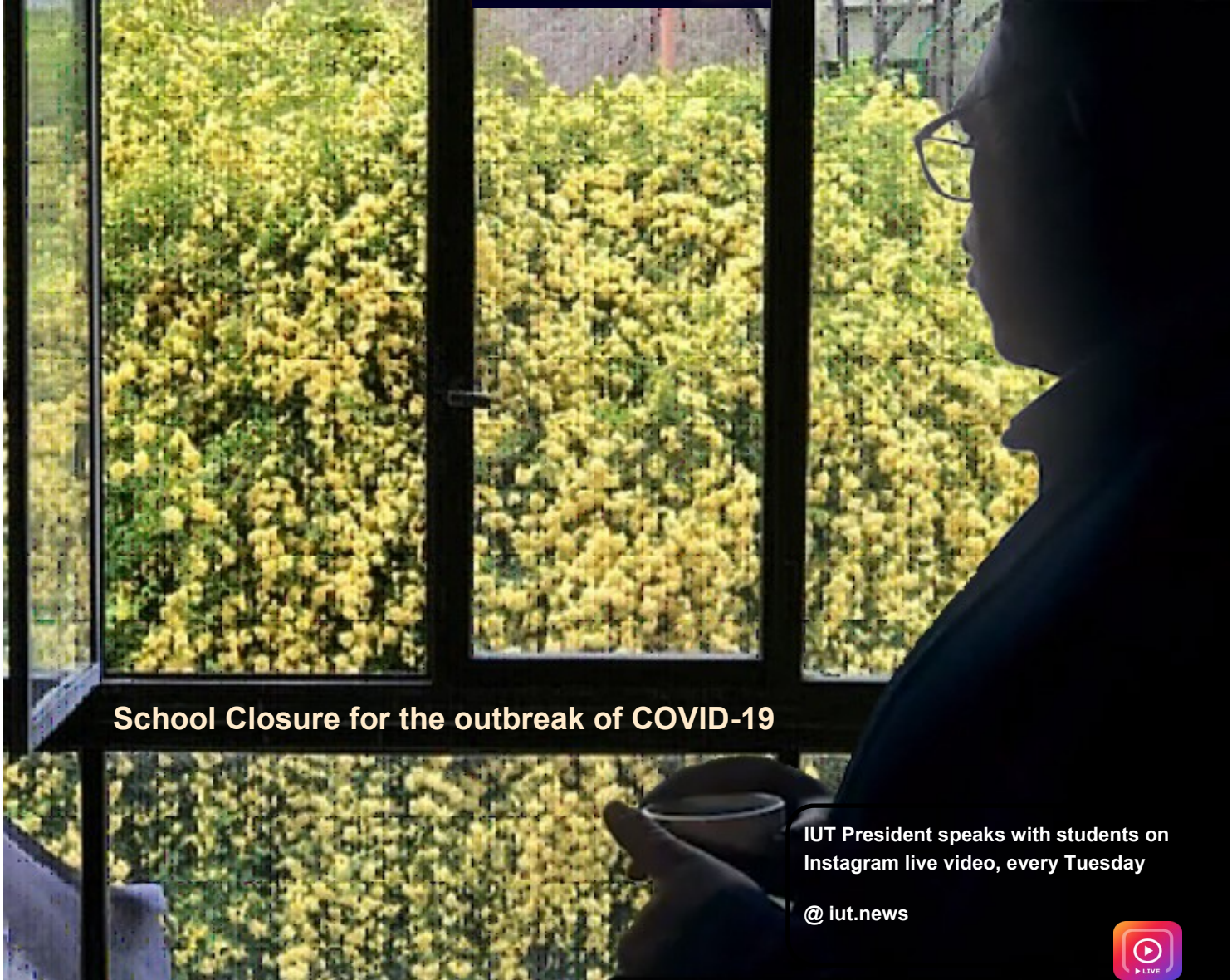
Isfahan University of Technology



Sixth Issue: March-April 2020

## COVID-19

IUT International E- Newsletter



### School Closure for the outbreak of COVID-19

IUT President speaks with students on Instagram live video, every Tuesday

@ iut.news



## Dear Students,

Isfahan University of Technology deeply misses you in this beautiful blossoming spring of IUT. But your health is our first priority. So, stay home, be positive and stick to your routines. I wish you all a joyful, successful and prosperous year ahead and hope to see you soon in the near future with smile all over your face.

Prof. Dr. S. Mehdi Abtahi, President



Dear Colleagues, Dear Students

In this unprecedented and difficult time, IUT\_International team remains committed to supporting all IUT staff and students.

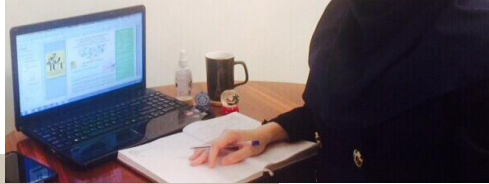
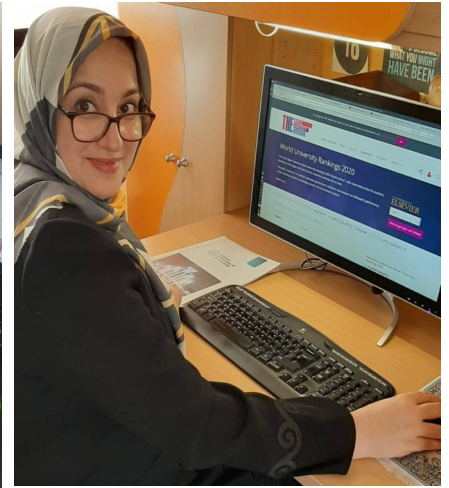
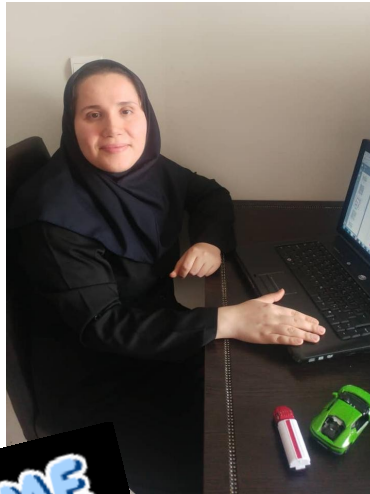
Even though our presence at the offices is currently in shifts, we are working from home and the International Affairs Center is always operational to provide all the necessary supports.

The contributions of IUT During the COVID-19 pandemic are crucial and we would like to make sure that our research perspectives are heard.

Wish you and your family all the best and hope for you to stay safe!

Best wishes,

**Sima Fakheran, Director of IUT International Scientific Cooperation Center**



## IUT Awards and Honors:

### IUT Among QS Top Universities Ranking 2020

Isfahan University of Technology has been ranked in **QS World University Rankings by Subject 2020**. IUT has been ranked in the **subject of Agriculture & Forestry**. It is of the **first Rank among Iranian Universities and 201-205 in the world**. IUT International would like to congratulate all of the IUT faculty members, students, alumni on this achievement.



The *QS World University Rankings by Subject* annually reveals the best universities in the world for 48 different subjects across five specialist subject areas including engineering and technology, natural resources, biological and medical sciences, social sciences, arts and humanities.

## Signed a Memorandum of Understanding with ITALY



UNIVERSITÀ DEGLI STUDI  
DI SALERNO

A Memorandum of understanding between

**the University of Florence, Italy** and **IUT** on Exchange program for faculty members and PhD students, initially in the fields of Food Science and Technology, has been signed in April 2020.

The Initiator of this MOU is Prof. **Dr. Milad Fathi** from the College of Agriculture.



In March 2020, an MOU between **IUT** and **the University of Salerno, Italy** was signed, for the exchange program under the EU Erasmus plus program. Based on this MOU, PhD students from different departments will be granted to spend 5 months at the University of Salerno as part of their research program. In this period they will be supported by European Union.



Erasmus+



## ISFAHAN UNIVERSITY OF TECHNOLOGY (IUT) CALL FOR COMPUTATIONAL RESEARCH ON COVID-19

The National High Performance Computing Center (NHPCC) at IUT offers computational support for research related to COVID-19. Researchers from all disciplines are invited to apply.

The call will be based on the research agenda defined by World Health Organization (WHO), the priorities of the Iranian Ministries for Science, Research and Technology (MSRT) and for Health, Treatment and Medical Training and the NHPCC will carry out the assessment of research relevance and priority.

The main applicant must be an Iranian citizen, holding current affiliation with one of the Iranian universities or research institutes.

Should you require further information in this regard, please contact NHPCC email.

Email: nhpcc@of.iut.ac.ir

#IUTfightcovid19



# IUT against

# COVID-19

## \*Impacts & Innovations

#IUTfightcovid19

The outbreak of coronavirus worldwide has led to closure and serious disruption in the education and research process at universities in more than 188 countries and the housing of more than 1.5 billion students around the world.

According to the mission of universities as science leaders in countries, researchers and academics of Isfahan University of Technology have also carried out extensive, effective and constructive knowledge-based actions. These measures are being carried out in line with the social responsibility of this university, supporting the valuable activities of the country's health care complex, as well as maintaining and promoting the health and psychological well-being of the community. The followings are some of the steps taken.

### Faculty of Textile Engineering



Dr. Hossein Izadan

Dean of Textile Engineering  
Faculty

Following the outbreak of the new respiratory virus SARS-COV-2 disease, the **Faculty of Textile Engineering** is engaged in a series of decisions and activities to help reduce the impact of the pandemic of COVID-19, on our students and staff, as well as the local region. Per the decision of the country's health authorities, all students have returned home and long-distance learning facilities have been provided them. Most staff have been asked to work from home. Moreover, many of our colleagues are sharing their expertise with local authorities, such as the FDA, regarding Personal Protective clothing standardization. To reduce the shortage of medical masks and gowns, they are, also, assisting industrial partners in the production of medical textiles for hospitals. Many proposals have

been filed by our academics to protect our health workers from the virus, including the preparation of ready-made and highly accessible materials for medical masks and gowns, production of protective antimicrobial clothing, especially effective against the COVID-19 virus, designing breathable gowns, etc.



Furthermore, the department's workshops and laboratories have been dedicated to research and activities related to the Coronavirus challenge. To our pride, our departmental Student Scientific Society has volunteered in making medical gowns for health workers involved in the COVID-19 crisis.

A difficult path lies ahead of us, but with the dedication of our staff and the patience of our students, the Department of Textile Engineering is sparing no effort in taking on the current COVID-19 predicament. I would like to make a chance to thank Mr. Janali Zade, Amir Hossein Panahi, Abbas Mohammadi, Dr. Ajeli, Mr. Atabati & Ms. Sara Shahin, Kimia Mazaheri, Fatemeh Bolouri, Bahar Moradi, Elham Yari. Zahra Khoshnavaz, Masoumeh Kazemi, Zahra Davar Panah,

Hajar Shafaei, Tayebe Samad Pour, Faeze Kharasvand, Soraya Soltan zade, Zahra Ershadi & Ms. Shakib Pour for their cooperation and great help.

### Smart Portable UV-c Gun Manufactured by Researchers at IUT



Researchers at the **Faculty of Mechanical Engineering** of IUT have designed and manufactured an easy-to-carry portable UV-c Gun that can be used to inactivate viruses, bacteria and harmful microorganisms at all levels and objects. Referring to the excellent features of this lightweight and portable disinfectant device, **Dr. Mehdi Karevan**, a faculty member of Isfahan University of Technology said: "This device, whose appearance is similar to home hair dryers and even can be designed with much smaller dimensions, is made with 6 watts of power and is also changeable and adjustable to lower powers."

He added: "The rechargeable battery with a relatively long life and possibility of multiple uses, as well as the very low weight and sound and optical warning systems at the time of activating ultraviolet rays are other features of this device. The device is easily rechargeable by regular chargers for 5V mobile phones or USB ports on TVs or laptops."

Students and graduates of IUT having collaboration in this project are: Aliakbar Dastgerdi (student of Mechanical Engineering), Mohammad Maghsoudi (student of Electrical Engineering) and Hossein Karavan (student of Materials Engineering).

## Disinfecting the City Train Wagons, Using a UV Device

### Disinfecting the City Train Wagons by Using a UV Device Designed and Manufactured by IUT Researchers

Researchers at the Faculty of Mechanical Engineering of Isfahan University of Technology have designed and manufactured a portable ultraviolet-based disinfectant device to clean the city train wagons and other public places.

The device, which was previously designed and manufactured to disinfect household objects was redesigned to disinfect the city train wagons and the environment of this busy area in the shortest possible time.

Compared to traditional methods of disinfecting such places using alcohol-based materials, this method has some advantages such as complete coverage of the interior of the wagons and significant speed in cleaning the environment.



After designing and manufacturing this device and its performance confirmation by the Research Institute of Biotechnology at Isfahan University of Technology, two units of this product were delivered to Isfahan City Train Company. It can also be used in the city trains of other provinces and other similar public places.



Earlier same researchers designed and manufactured two home disinfectant devices using the same ultraviolet radiation. NOURA SANITIZER UV50 is a microwave-size device which is used at homes and has a capacity of 50 liters and is equipped with finest UVC lamps free of ozone. The objects that are brought home can be put in this device for some minutes to inactivate the possible viruses and bacteria on them.

These devices, which were designed and manufactured by **Dr. Ehsan Forouzmehr**, **Dr. Mohsen Badrossamay** and **Dr. Ali Maleki**, the faculty members of IUT in **Noura Layeh Negar Spin-off Co.** located in ISTT, use the disinfecting properties of UVc beam in their structures.

# IUT against

# COVID-19

# \*Health Care

#IUTfightcovid19

## Director of the IUT Public Relations reports:

*By designing and manufacturing two products to disinfect objects, production of about 40000 face masks and 100 hospital gowns per day, the researchers at IUT demonstrated their technical and specialty capabilities associated to social responsibility of the university to fight coronavirus*

**Mr. Mohammad Javad Barati**, the director of public relations at IUT, stated that within a productive collaboration between IUT and the Mobarakeh Steel Co. and Investment of this industry, one of the biggest and most advanced production lines of N95 standard masks is being established in IUT.

This production line has the capacity to produce 20000 of N95 masks with 5 and 6 layers in high quality in a space fully mechanized, clean and isolated.

Mr. Barati also pointed to the efforts made by the specialists in Nanotechnology and Biotechnology Institutes at this university in Ahoura Industry Nano-biology Co. which is a spin-off Co. of IUT. Standard textiles for producing 15000 nano-masks per day is produced in this line.

Another attempt was made by the faculty members at the Faculty of Textile Engineering in a close collaboration with Isfahan Mahoot Fibers Company which is another spin-off company of this university and more than 3500 standard face masks with three layers are being produced per day.

The disinfectant devices with home applications using UV and portable UV device are two crucial products manufactured by the researchers of the Faculty of Mechanical Engineering.

Like always, in a volunteer job, some students of the university have embarked on producing 100 hospital gowns in one of the workshops of the Faculty of Textile Engineering at IUT.

Preparing more than 1000 packages of disinfectant solutions, masks, sanitary gloves and distributing them in some impoverished neighborhoods in the province as well as having collaboration with active Jihadi Groups in the field of healthcare are among some other social responsibilities of the academics performed in this crisis.



## IUT Health Care Center

The IUT Health Care Center was the first part of the university to mobilize its forces to fight the coronavirus and to take practical steps to provide services for the academics.

*The following is the point list on IUT Actions to Fight COVID19 since Feb. 2020, reported by the Director of IUT Health Center, Dr. Zahra Momtazpour (MD):*

### BEFORE THE OUTBREAK

- Corresponding to different sectors of the University and communicating the general instructions given by the Ministry of Health and Medical Education.
- Taking healthcare actions to prevent outbreak of the virus in the faculties and dormitories, especially for the foreign students
- Cancelling all national and international conferences

### AFTER THE OUTBREAK:

- 1- Holding urgent meeting of the Crisis Committee (consisting of the University President, Director of the IUT Healthcare Center, and the University's Vice-presidents) and taking the required actions to fight the Virus.
- 2- Presence of the Director of the IUT Healthcare Center in councils like education, and reporting and communicating the instructions.
- 3- Providing the required information for the IUT Board of Directors to cancel extracurricular programs
- 4- Cancelling fingerprint attendance system.
- 5- Training the students of the Health Association at the IUT Healthcare Center and also the effective students in cluster training.
- 6- Taking preventive actions to disinfect the buildings of the University.
- 7- Training the University personnel about the disease, how to prevent and control it.
- 8- Cancelling all educational activities and student programs .
- 9- Managing and supervising the disinfection process.
- 10- Using social media to train people about coronavirus.
- 11- Installing banners and posters in different areas of the university.
- 12- Providing disinfectants for units, faculties, dorms, elevators etc.
- 13- Sending the patients with suspicious symptoms to hospital and tracking the patients' conditions .
- 14- Evacuating student dorms to the possible extent.
- 15- Evaluating the students' health at dorms.
- 16- Isolating the students with suspicious symptoms and providing sick rooms at dorms.
- 17- Facilitating the procedures for the people with suspicious symptoms without coming in person.
- 18- Presenting compulsory absence leave for the students, staff, and faculty members having specific diseases.
- 19- Interviewing with the director of the healthcare center to assuage public fears.
- 20- Holding meetings and calls for student groups and knowledge-based companies at ISTT to provide and supply disinfectants and masks.
- 21- Carrying out daily temperature tests on the university personnel and healthcare center.



*Dr. Zahra Momtazpour, Director of IUT Health Care*



To All The Healthcare  
Workers On the  
Front Lines Of The  
Coronavirus Pandemic:

#IUTfightcovid19

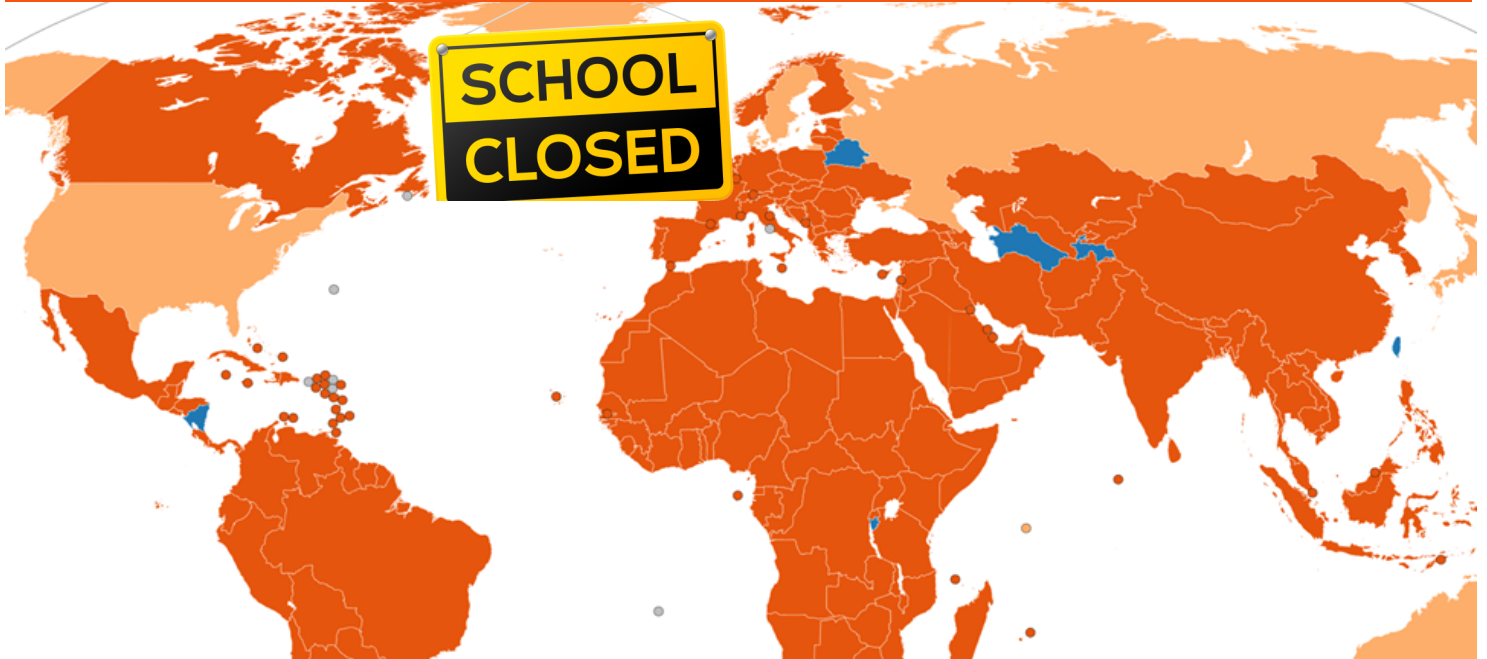
THANK YOU!



# IUT against COVID-19

## \*Education

#IUTfightcovid19



### COVID-19 Educational Disruption and Response

Reported by UNESCO: Most governments around the world have temporarily closed educational institutions in an attempt to contain the spread of the COVID-19 pandemic.

These nationwide closures are impacting over 90% of the world's student population. Several other countries have implemented localized closures impacting millions of additional learners.

The statistics up to now: 189 country-wide closures, 1,538,721,041 affected learners, 87.9% of total enrolled learners

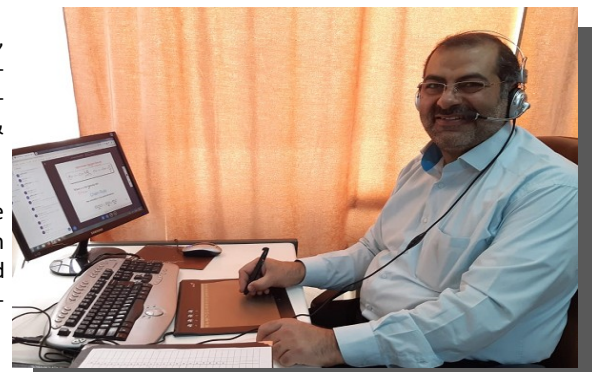


### Coronavirus Fails to Stop Holding the Courses at IUT; All of the Courses will be Covered Online

The Deputy for education at the Faculty of Electrical & Computer Engineering, **Prof. Dr. Ahmadzadeh**, asserted that more than 30 faculty members at this faculty are preparing materials for more than 40 course groups in both graduate and undergraduate programs. The virtual classes are held both online and offline associated with interventional Q & A sessions.

Stating that there is no obstacles in regard to the available technology, he added that the faculty members at IUT are pioneers in production and using electrical systems in education and research. This university has a great history in distance learning (Electrical & web-based courses) since 2006. Recently, the infrastructures for holding these courses have been developed both qualitatively and quantitatively.

In regard to the procedures for the current academic year and examinations, Dr. Ahmadzadeh said that the virtual classes were started with a little delay and the rest of the semester is contingent upon the country's conditions. However, it is a quite apt suggestion that the professors and students acquire the required preparations to manage the educational crisis for the rest of the year.





## IUT & Online Courses

IUT Shared the online courses with the Universities of Farsi-speaking countries by the Faculty of Electrical and Computer Engineering (ECE)

Given the new situation following COVID-19 crisis, the Faculty of Electrical and Computer Engineering (ECE), Isfahan University of Technology, in fulfilment of its social responsibility, is sharing its online course contents worldwide, for all Farsi-Speaking students. These courses are available on the following channel at: <https://www.aparat.com/ECEIUTChair/playlists>

The courses cover a part of curriculum for engineering students in the field of electrical and computer engineering, and they will be gradually updated with new contents during Coronavirus outbreak.

In this regard, the dean of ECE faculty, conducted correspondence with the universities of Persian-speaking countries in the region in the early days of the Persian New Year 1399.

In these letters, **Prof. Dr. Ahmadrza Tabesh**, wished them a healthy transition from the unfavorable conditions caused by the prevalence of Coronavirus pandemic and educational problems related to this issue and offered them the link of the channel.



Dr. Ahmadrza Tabesh

Dean of ECE Faculty



## IUT & Online Teaching

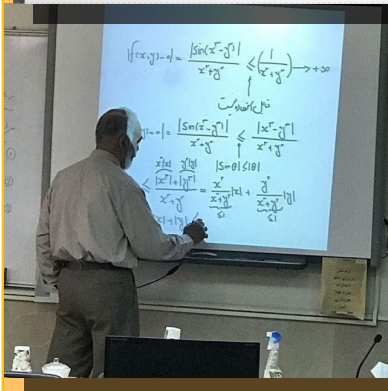


### Application of Machine Learning In Mechanical Engineering

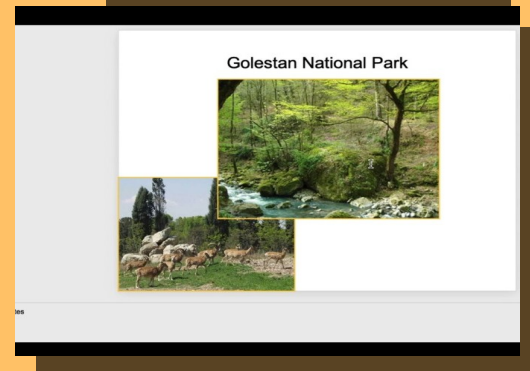
Department of mechanical engineering  
Isfahan University of Technology  
Mahmud Ashrafizaadeh



Stay home, Save Lives



### Natural Resources Economics



## COVID-19 spread and its effects on Sustainable Development Goals

COVID 19 pandemic and its consequences like schools and universities closures and home quarantines are new, weird and joint experiences for all humans worldwide. Despite the heartbreaking consequences of this pandemic in killing people all over the world, it has made dramatic effects on other economic, environmental, and social aspects.

The social-economic report published by the United Nations in March 2020 is about the effects of COVID 19 on sustainable development which implies that this crisis is likely to exert dramatic and negative effects on sustainable development. Long-term slowdown in global economy will cause unfavorable effects on implementation of SDGs and the Paris Agreement on climate change. The following figure shows the effects of this pandemic on SDGs.



No country is able to get out of this crisis by itself. The United Nations emphasizes that participation of all countries is necessary to overcome this pandemic. Three major steps below are recommended by this organization to defeat COVID 19: The first step is suppressing the virus and stopping the pandemic with leadership of WHO. The second step includes an attempt to reduce the unexpected effects of such events on the lives of millions of people in terms of economy and livelihood. The third step is learning from this crisis and strengthening the infrastructures for the future.

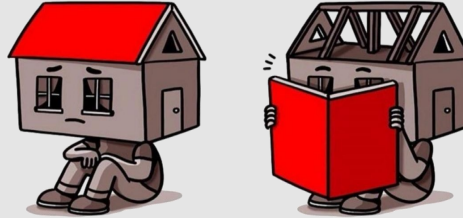


*Mina Tajvari,*

Adopted from: *SHARED, RESPONSIBILITY, GLOBAL SOLIDARITY: Responding to the socio-economic impacts of COVID-19, March 2020*



The whole world is in Quarantine,  
but PLEASE  
**Don't isolate  
your imagination**



## 15 Qualities of A Great Team Member



### 8. Good Communicator

It's impossible to work together as a team if individual members don't fully understand one another. Communication skills are imperative for anyone working in a team environment.

Arguably the most important communication skill is knowing how to give tactful, constructive criticism. By showing appreciation for what the person did well, and then explaining what they could have done better, this creates a positive framework for the criticism and will lead to a much more positive outcome.

Being a good communicator also means knowing when to stay silent. Oftentimes, if you don't have an insightful comment that will drive the discussion forward, it's better to say nothing. Good listeners don't receive the same formal recognition as good talkers, but they're just as valuable to a team.

### 9. Confident

People prefer to work with confident (not arrogant) teammates for a number of reasons. When you have a positive self-image, you're less inclined to engage in passive aggressive behavior and gossip (which primarily serves as a short-term self-esteem boost). Confident people prefer to give compliments that make people feel better, rather than slander their colleagues. Also, confident people aren't as emotionally reactive to failure and criticism. While an insecure person may view constructive criticism as a personal attack, a confident person will view the same information as feedback that they can use to make improvements.

### 10. Able of Multitask

In the modern era, employees rarely have the chance to focus on one project at a time. In most situations, employees are required to juggle a handful of tasks while rigidly adhering to deadlines. For this reason, multitasking is one of the most common traits that employers screen for in job interviews.

It's no surprise that employees who are able to multitask effectively are always well organized. By sticking to a daily sleep and exercise routine, decluttering your desk regularly, writing down information that you can't remember and creating a task list in the mornings for your work days, your ability to multitask will improve exponentially. By cutting off distractions such as email and phone notifications while you work, you'll find it easier to overcome procrastination. Also, you may get better results by doing your least favorite tasks early in the morning and giving yourself small rewards for tasks completed. By striving for consistency instead of perfectionism, your productivity and ability to multitask will increase.

To be continued....

11. Detailed Oriented 12. Autonomous 13. Adoptable, 14. Understand s the Industry  
15. Persistent

<https://biz30.timedoctor.com/team-member-qualities/>

## Contact us:

Tel: 031-33912505-6  
Fax: 031-33912511  
E-mail: [international@iut.ac.ir](mailto:international@iut.ac.ir)  
[isco@cc.iut.ac.ir](mailto:isco@cc.iut.ac.ir)  
Website: [iscoweb.iut.ac.ir](http://iscoweb.iut.ac.ir)  
Address: IUT International—  
Isfahan University of  
Technology  
Telegram: IUT\_International  
Instagram: IUT\_International

IUT International Newsletter is a periodic E-newsletter to be distribute among IUT students and staff.

Your constructive comments and suggestions are most welcomed.

Sixth Issue: March-April 2020



Managing Editor:  
Sima Fakheran, PhD

Editor-in-chief:  
Neda Shams

News & Design Director:  
Nassim Yazdianpour

Associate Editor:  
Mohammad Baqeri

Licensed by:

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Special Thanks to IUT Healthcare center, Department of Textile Engineering, IUT Public Relations and IUT International staff for their great helps.

