BIT winter school at UPM

2018
ABOUT THE INTERNATIONAL WINTER SCHOOL

The aim of the winter school is to offer students a comprehensive understanding of Spain and China-Spain cooperation. It sets out to improve students’ global horizons and abilities to communicate with people from different cultural backgrounds. It aspires to promote students’ analysis capabilities, and offers the chance to investigate some of the core issues facing mankind from different perspectives.

PROGRAM LENGTH AND DATES

January 22th – February 3th, 2018
Two weeks

PROGRAM FEES

€1,800 per person, including course tuition, accommodation, cultural activities, airport transfer and medical insurance.

PROGRAM STRUCTURE

30 lecture hours
- Technical lectures in English given by UPM faculty and alumni
- Conferences and chats with industry experts
- Rich lab material to engage young students with trending technologies (visits to research centers and companies)
- Face-to-face Spanish language tuition
- Cultural activities in Madrid and surrounding towns

PROGRAM SCHEDULE

Each topic is divided into 4 sessions: 2 lectures (one and a half hours each), 1 visit to a research center or company and 1 conference with an industry expert.
Winter school tech topics include:

- Genomics
- Robotics
- Big Data
- Nanotechnology
- Internet of Things
About UPM

The Universidad Politécnica de Madrid (UPM) is Spain’s largest technological university and one of Europe’s leading institutions.

Awarded two International Campus of Excellence seals, the UPM is renowned for its research activity and for training highly qualified, competitive professionals.

Tradition and innovation join forces at its schools, where a large part of Spain’s technological history has been written.

The UPM is currently working on applying innovative solutions to the major challenges of global development and sustainability.

Located in the Autonomous Community of Madrid, the UPM provides an outstanding scientific and intellectual environment.

More than 40,000 students study at its four campuses, enrolled in undergraduate degrees covering all areas of engineering, architecture, sports sciences and fashion design, as well as specialized postgraduate training of outstanding academic quality and excellence.

The UPM has a high international profile with numerous strategic alliances. Highlights are its delegations in the United States and China. It has signed around one hundred double degree agreements with international centers of excellence to promote the mobility of its students and teaching and research staff.
More than **3,000 researchers in 200 research groups** are investigating real solutions to the needs of a constantly changing world.

The UPM leads the participation of Spanish universities in the **Seventh European Union Framework Programme** for Research and Technological Development.

With more than **80 Industry-University Chairs**, the UPM has strong ties with the business sector and provides solutions to meet demands for innovation and development.

The UPM hosts one of the most active **entrepreneurial environments**, where more than **150 companies** have been formed in recent years in the context of its entrepreneurship program.

The UPM offers **much more than just an academic experience**. The campuses hold activities to promote culture, sports, and individual and team effort.

The UPM is committed to the **development of society** and pursues an active policy of education without barriers and workplace hazard prevention.

At UPM, social commitment goes beyond the campus: the UPM promotes **voluntary work** and is a leader in the field of university development cooperation.
Total number of Schools: 18

<table>
<thead>
<tr>
<th>Programs</th>
<th>Total Programs</th>
<th>Total Students</th>
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</thead>
<tbody>
<tr>
<td>Undergraduate</td>
<td>50</td>
<td>27,128</td>
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<tr>
<td>Postgraduate</td>
<td>86</td>
<td>5,143</td>
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<tr>
<td>Doctoral</td>
<td>44</td>
<td>1,904</td>
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Beijing Institute of Technology (BIT) is a public university with a great strength on science and technology but developing into other areas such as management and humanities. The University emphasizes ethics in scholarship, discovery of truth, and contribution to manking through academic accomplishment.

VISION
Aspires to be a world class research-intensive university oriented in science and technology with distinctive Chinese characteristics.

MISSION
BIT is dedicated to: developing lofty ideals and sound scholarship; maintaining a strong body and a quiet heart; evolving a pragmatic and humble spirit; creating a culture of excellence; improving research capabilities; achieving distinctions in defense technology

INTERNATIONAL RANKINGS
QS World University Rankings (2017) #389
QS Asian University Rankings (2017) #80

Student and Employee Headcounts

<table>
<thead>
<tr>
<th>Category</th>
<th>Count</th>
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<tbody>
<tr>
<td>Full-time students</td>
<td>28.174</td>
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<tr>
<td>Undergraduates</td>
<td>17.789</td>
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<td>Masters</td>
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<td>Ph.Ds.</td>
<td>3.416</td>
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<td>International students</td>
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<td>Employees</td>
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<tr>
<td>Fulltime academic staff</td>
<td>2.143</td>
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<tr>
<td>Staff</td>
<td>1.199</td>
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About BIT: education

4 Faculties

Faculty of Mechanical and Transportation Engineering
- School of Aerospace Engineering
- School of Mechatronical Engineering
- School of Mechanical Engineering

Faculty of Natural Sciences and Materials
- School of Materials Science and Engineering
- School of Chemistry and Chemical Engineering
- School of Life Science
- School of Mathematics and Statistics
- School of Physics

19 academic Schools

Faculty of Information and Electronics
- School of Optoelectronics
- School of Information and Electronics
- School of Automation
- School of Computer Science and Technology
- School of Software

Faculty of Humanities and Social Sciences
- School of Management and Economics
- School of Humanities and Social Sciences
- School of Law
- School of Foreign Languages
- School of Art and Design
- Graduate School of Education
About BIT: programs

Top Ranking Programs in China

- Mechanical Engineering
- Weapon Science and Technology
- Engineering Mechanics
- Power Machinery and Engineering
- Optical Engineering
- Physical Electronics
- Information and Communication Engineering
- Control Theory and Control Engineering
- Applied Chemistry
- Material Science and Technology

- 19 postdoctoral programs
- 97 doctoral programs
- 193 master programs
- 66 undergraduate programs