



学员条件和要求

REQUIREMENT FOR TRAINEES

- 1.培训学员应来自发展中国家，由有关政府部门或当地合法的非政府组织推荐；
- 2.年龄在45岁以下（少数可例外），具备大学本科及以上学历或同等学历；
- 3.身体健康、无传染病；
- 4.具备英语听、说、读、写能力；
- 5.熟悉本国机械制造、激光加工等相关方向的发展现状并提供一份有关激光智能制造技术发展现状的报告（同一国家若有多人报名，则指定一名学员完成）；
- 6.不得为外国在华工作、留学人员，不得携带家属陪同；
- 7.在华培训期间，遵守中华人民共和国的有关法律、法规，尊重中国的风俗习惯；
- 8.参加培训人员须在培训结束后按时回国；
- 9.学员在通过E-mail联系培训承办单位联系人并提交有关个人信息后，通过科技部发展中国家技术培训班招生系统登记个人信息。（所有参加本次培训班的学员均应在科技部发展中国家技术培训班招生系统自行登录注册。）培训申请表截止日期为2021年7月10日；

科技部发展中国家技术培训班招生系统的网址为：

https://mostitp.cistc.gov.cn/student_login.aspx

- (1) Trainees should be from developing countries and recommended by the relevant government departments or local legal non-governmental organizations;
- (2) No more than 45 years old (with a few exceptions), bachelor degree or above (or equivalent);
- (3) Be in good health, both physically and mentally, to undergo the training;
- (4) Good ability for English listening, speaking, reading and writing ;
- (5) Trainees should be familiar with the current development of domestic machinery manufacturing, laser processing and other related directions. In order to share the information and experience, each trainee needs to prepare a report about the current status and development of intelligent laser manufacturing technology of the trainee's country; If there are more than one applicant in the same country, one trainee should be appointed to complete the registration. Personnel who work or study in China will not be accepted by the workshop, the trainee is not allowed to bring their family;
- (6) Personnel who work or study in China will not be accepted by the workshop. And no family members are allowed to follow.
- (7) The trainees are required to abide the laws of the People's Republic of China, and respect the manners and customs of Chinese people during their stay in China;
- (8) The trainees need to return to their countries after completing the training;
- (9) After contacting with the contact person of the training workshop and submitting personal information by E-mail, trainees are required to register personal information through the enrollment system of technical training workshops for developing countries of the Ministry of Science and Technology. (All trainees in this training workshop should log in to self-register in the enrollment system of technical training workshops for developing countries of the Ministry of Science and Technology.) The deadline for training applications is July 10, 2021 .

The enrollment system website of the technical training workshops for developing countries by the Ministry of Science and Technology is:

https://mostitp.cistc.gov.cn/student_login.aspx



结业证书

Certificate of Completion

学员完成培训后将获得由中国科学技术部国际合作司颁发的结业证书。
After completing the training, the trainees will be awarded the Certificate of Completion from the Department of International Cooperation of Ministry of Science and Technology of PRC.



费用安排

EXPENSES

- 1.培训班承办方负担学员在华培训期间的培训、住宿、伙食和在培训地当地交通等费用；
- 2.学员从本国到培训地的往返国际旅费及中转费，在培训期间的国内、国际长途电话费、行李超重费和国内工资等由本人承担。
(1) Unit organizer is responsible for the training, accommodation, meals, local transportation and other expenses during the training period in China.
(2) The international round-trip costs between the trainee's country and the training base and transfer fees should be borne by the trainees themselves. During the training period, the trainees themselves shall be responsible for the domestic and international long-distance telephone charges, baggage overweight fees and domestic wages, etc.



申请和审批手续

APPLICATION AND ADMISSION

- 1.报名学员需在2021年7月10日之前将如下报名材料发送至sunshufeng@qut.edu.cn；①申请人应填写申请表（见附件）并签名；②个人简历；③《单位推荐信》，推荐信必须有单位正式盖章推荐，任何个人推荐均视为无效；④个人有效《健康证明》；⑤护照扫描件（如果不是第一次来中国，请同时将以前来中国的签证及出入境记录页扫描）；⑥所在单位的营业执照扫描件；⑦工作证件或者能证明是该单位职员的材料。请注意，邮件附件不能超过20M。
- 2.青岛理工大学对学员提交的报名材料进行审核后，将申请递交中国科学技术交流中心审核，并向被录取的学员发送《录取通知书》、《邀请函》和初步行程时间表，学员凭《录取通知书》和《邀请函》办理来华手续，并携带《录取通知书》和《健康证明书》等有关材料按时到培训单位报到。
- 3.录取学员需在2021年8月10日前将国家激光智能制造技术发展现状报告的电子版发送至sunshufeng@qut.edu.cn。

- (1)The applicants should complete online application and send the following materials to sunshufeng@qut.edu.cn before **July 10, 2021** ①Application Form, applicants should fill in the attached application form and sign their names; ②Curriculum Vitae; ③Unit Recommendation Letter, the letter must be officially signed and stamped by the unit, any personal recommendation is considered to be invalid; ④Valid Health Certificate; ⑤Scanned Copy of Passport, and if you have been to China before, please provide scan copy of the visa and entry-exit records page that you came to China; ⑥Scanned Copy of Your Unit's Business License; ⑦Certification that prove you are staff of your unit. Please note that the attachments of your email can not exceed 20M, or we can not receive it.
(2)After being approved, Admission Letter, Invitation Letter and a preliminary itinerary schedule will be issued to the accepted applicants by related government department. The trainees should go through the formalities for coming to China in advance and report to the training unit on time with relevant materials.
(3) The accepted applicant needs to send the report about the current status and development of laser intelligent manufacturing technology of their country to sunshufeng@qut.edu.cn before **August 10, 2021**.



报名联系方式

CONTACT INFORMATION

青岛理工大学	Qingdao University of Technology, Qingdao, China Tel: +86--532-68052762 Fax: +86-0532-85071000		
联系人：	孙树峰	Sun Shufeng	Tel: 0086-15753237937 E-mail: shufeng2001@163.com sunshufeng@qut.edu.cn
Contacts:	张丰云	Zhang Fengyun	Tel: 0086-15634217188 E-mail: 900fengyun@163.com
	王茜	Wang Xi	Tel: 0086-18553222729 E-mail: wangxi_0606@163.com
地址：	中国山东省青岛市西海岸新区嘉陵江路777号		
Add:	No.777, Jialingjiang Road, West Coast New Area, Qingdao, Shandong, China		



青岛理工大学
QINGDAO UNIVERSITY OF TECHNOLOGY

International Training Workshop on Laser Intelligent Manufacturing Technology and Equipment

激光智能制造技术与装备国际培训班

Admission Brochure

招生简章

主办单位/Organizer :

青岛理工大学 机械与汽车工程学院

Qingdao University of Technology, School of Mechanical & Automotive Engineering

青岛激光精密微纳制造技术与装备国际合作基地

山东省激光绿色高效智能制造工程技术研究中心

山东省激光绿色智能制造技术与装备协同创新中心

Qingdao International Cooperation Base of Laser Precision Micro/Nano Manufacturing Technology and Equipment

Shandong Research Center of Laser Green Efficient Intelligent Manufacturing Engineering and Technology

Shandong Collaborative Innovation Center of Laser Green Intelligent Manufacturing Technology and Equipment

中国 青岛 Qingdao China
2021.9.06-9.25





背景 BACKGROUND

“激光智能制造技术与装备国际培训班”是经中华人民共和国科学技术部批准确立的2020年度发展中国家技术培训项目，由青岛理工大学机械与汽车工程学院承办，计划于2021年9月在中国青岛开班。

青岛理工大学位于山东省青岛市，始建于1952年12月，是一所以工为主，理、工、经、管、文、法等多学科协调发展的多科性大学，系山东省重点建设的应用基础型人才培养特色名校。机械与汽车工程学院拥有山东省机械工程实验教学示范中心和山东省机械工程专业工程训练中心，形成了学士-硕士-博士-博士后等完整的多层次人才培养体系。现有“海洋环境混凝土技术”创新引智基地（国家“111计划”）、激光精密微纳制造技术与装备国际合作基地。特聘中国科学院院士1人、中国工程院院士3人、外籍俄罗斯联邦科学院院士1人。国家“千人计划”人选3人，百千万人才工程国家级人选4人，教育部新世纪优秀人才支持计划获得者3人，享受国务院政府特殊津贴的专家23人；泰山学者优势特色学科领军人才1人，泰山学者11人，山东省高等学校首席专家6人。另外，该培训班负责人孙树峰教授，2015年11月被评为山东省泰山学者特聘专家，2016年获得青岛市和西海岸新区创新领军人才称号。山东省激光绿色高效智能制造工程技术研究中心主任，山东省激光绿色智能制造技术“十三五”高校重点实验室主任，山东省激光绿色智能制造技术与装备协同创新中心主任，中国机械工程学会成组与智能集成技术分会委员，山东省高层次人才发展促进会先进制造专业委员会委员，国家国际合作重大专项和国家科技奖评审专家。近年来，青岛理工大学发挥青岛的地域优势并结合学校在机械制造方面的先进技术成果，围绕“一带一路”国家发展战略，为振兴中国的科技发展作出了应有的贡献。

青岛是著名的滨海度假旅游城市和国际性港口城市，位于山东半岛东南部（东经119°30'~121°00'、北纬35°35'~37°09'），总面积11282平方米，人口929.05万）。青岛地处温带季风区域，属温带季风气候，温度适中，四季分明，9月份平均气温20~27℃。

“International Training workshop on Intelligent Laser Manufacturing Technology and Equipment” is an annual technical training program established for developing countries approved by Ministry of Science and Technology of the People's Republic of China (PRC) in 2020. The program is undertaken by the School of Mechanical and Automotive Engineering Qingdao University of Technology, is scheduled to start in **september** 2021.

Founded in December 1952, Qingdao University of Technology is located in Qingdao, Shandong Province. It is a comprehensive university that focuses on Engineering, develops coordinately with other disciplines such as Science, Economics, Management, Literature and Law and Art, and also key constructed by Shandong Province as a famous university featuring application-based talents training. There is Shandong Provincial Mechanical Engineering Experimental Teaching Demonstration Center and Shandong Provincial Mechanical Engineering Training Center in the school of Mechanical & Automotive Engineering, forming a complete bachelor - master - doctor - postdoctoral and other complete multi-level personnel training system. The existing “Marine environment concrete technology” innovation and talent introduction base (National “111 plan”), International Cooperation Base of Laser Precision Micro-Nano Manufacturing Technology and Equipment are within the faculty. Currently, the university has one academican of the Chinese academy of sciences, three academicians of the Chinese academy of engineering and one academican of the Russian federation. In our faculty, there are also three high-end talents chosen from the national ‘Thousand Talents Program’, four talents from the ‘Hundred, Thousand and Ten Thousand Talents Project’, three winners of the ‘Education Ministry’s New Century Excellent Talents Supporting Plan’, 23 experts who enjoy special government allowances, one leading talent of Taishan scholar advanced characteristic discipline, 11 distinguished professors from the “Taishan Scholar”.and six chief experts of Shandong Province's institutions of higher learning.

In addition, the person who is in charge of the training workshop, Professor ShuFeng Sun, was awarded as the special expert of Taishan scholars in Shandong Province in November 2015, and won the title of innovative leading talent of in the area of Qingdao and west coast new district in 2016. In the field of green efficient and intelligent laser manufacturing, professor Sun is the director of Shandong Research Center of Laser Green Efficient Intelligent Manufacturing Engineering and Technology, the director of one of the “13th five-year” key laboratory of universities, and the director of Shandong Collaborative Innovation Center of Laser Green Intelligent Manufacturing Technology and Equipment. Professor Sun is a member of the group and intelligent integration technology branch of the Chinese society of mechanical engineering, the member of the advanced manufacturing specialty of the high-level talent development promotion association of Shandong Province.

In recent years, focusing on the “The Belt And Road” national development strategy, Qingdao University of Technology has made due contributions to the revitalization of Chinese scientific and technological development by making full use of Qingdao's geographical advantages combined with the university's advanced technological achievements in machinery manufacturing. Qingdao is an international port city, and is also famous as a tourism and vacationing seaside city. It is located in the southeast of Shandong peninsula (from 119°30' to 121°00' east longitude, from 35°35' to 37°09' north latitude), covering a total area of 11,282 square kilometers with about 9.3 million people. It is in the north temperate monsoon zone and has a mild climate with four distinct seasons. **Average temperature is 20~27℃ in September.**

目标 OBJECTIVES OF THIS TRAINING

举办此次“激光智能制造技术与装备”国际培训班是为了促进我国与受训的发展中国家在激光技术及应用方面的交流与合作，促进这些国家在激光技术领域的独立研发与应用，向发展中国家分享我国在激光技术及应用方面创新的成功经验，推动我国科技成果的现代化、产业化和国际化进程。

Holding this international training workshop, aims to promote the communication and cooperation of laser technology and applications between developing countries and China, promote the independent research and application of these countries in the field of laser technology, moreover, share the Chinese successful experience of innovation in laser technology and application to developing countries, and simultaneously promote the modernization, industrialization and internationalization of Chinese scientific and technological achievements.

培训方式及内容 CONTENTS AND FORMS OF TRAINING

培训包括课堂教学、专题讲座、分组交流、现场考察、参观实习等灵活的教学方式。如果受到疫情影响不能来华参加现场培训，我们将实行网络视频培训的方式进行，邀请国内外相关领域的专家、科研人员以及企业的技术人员进行在线授课。授课内容包括：激光加工原理、中国激光加工技术的研究现状、激光技术在相关领域的应用及发展前沿、激光工程中的光学与光学效应、全息并行技术在飞秒激光加工中的应用、3D智能制造技术、机械状态监测与故障诊断技术、激光技术在新旧动能转换中的重要作用等，同时涵盖实地参观青岛及周边相关企业、研究院所以及实验室实践操作等。

The training is flexible including classroom teaching special lecture, group communication, site inspection, visiting internship, etc. Affected by the COVID-19, if people who take part in the workshop cannot come to China, the training ways will be carried out with internet video. Excellent experts, researchers and technical personnel of enterprises in relevant filed at home and abroad are invited in this training program. The main contents of the course are listed as follows.

- (1) Laser processing principle
- (2) Research status of laser processing technology in China
- (3) The application and development frontier of laser technology in related fields
- (4) Optics and optical effects in laser engineering
- (5) The application of holography technology in femtosecond laser processing
- (6) 3D intelligent manufacturing technology
- (7) Advanced mechanical condition monitoring and fault diagnosis technology
- (8) The important role of laser technology in the conversion of old and new kinetic energy

At the same time, the course also includes on-site visits to relevant enterprises, research institutes and laboratories in Qingdao and surrounding areas.

培训时间、地点、语言及招收信息 DATE, VENUE, LANGUAGE AND ENROLLMENT

时间	2021年9月6日-9月25日（20天）
培训方式	中国青岛现场培训，或网络视频会议
招生规模	20人
招收对象	学员需具备激光技术、机械设计与制造技术、光学工程、电子技术、材料科学与工程等相关方向的基础理论知识，高校或相关企事业单位的技术人员、科研人员、管理人员或政府官员等。招生对象主要针对发展中国家，特别是“一带一路”沿线发展中国家，每个国家选派1到4人。
培训语言	英语



Date	From September 6 to September 25 , 2021
Mode of training	Training in Qingdao, China or through internet video
Enrollment	20 people
Trainees	Trainees are required to have the basic theoretical knowledge of Laser technology, Mechanical design and manufacturing, Optical engineering, Electronic technology, Material science and engineering or other related fields, as well as technical personnel, scientific research personnel, management personnel or government officials from universities or related enterprises. The main target is the developing countries, especially the developing countries along the "the Belt and Road", furthermore, 1 to 4 people from each country will be selected.
Language	English