## GUIDE TO IC SERVICE

#### POLYU IC



The Industrial Centre (IC) of The Hong Kong Polytechnic University (PolyU) is established in 1976 aiming at providing traditional and basic training activities as part of the overall education package for engineering and construction students. Being one of PolyU's Administrative and Supporting Offices, IC serves to provide engineering education as well as technical & research support to researchers and students to realize their research, projects and incubation initiatives.

IC is a "Technical Library" equipped with a complete collection of engineering facilities and equipment together with a pool of expertise in different engineering disciplines. It is the only establishment of its kind among the local 8 UGC-funded universities.

### IC at a Glance

Year of Establishment 1976

Nature PolyU's Administrative & Supporting Office

No. of Staff

Around 100, mainly <u>engineering and technical staff</u>
specialized in different technologies and expertise

Floor Area 6 floors located at Block W & U with approx. 10,200 sq. m

Accreditation

- Approved Training Centre of the Hong Kong Institution of Engineers (HKIE) Graduate Scheme A Training and therefore its hands-on learning activities are recognized as part of the HKIE Graduate Scheme A Training
- <u>BIM Manager Course Provider</u> accredited by Construction Industry Council (CIC)
- SOLIDWORKS Academic Certification Provider accredited by Dassault Systèmes

Programme Served

<u>70+ academic programmes</u> (including one programme jointly offered by IC and PolyU HKCC)

No. of Students Served

<u>Learning activities</u> provided to approximately 4,000 students each year

**Professional Practical Training** 

Professional certification as part of curriculum or cocurricular course

- CAD HKAR-147 Aircraft Maintenance Training
- <u>CIC Certificate of BIM Manager</u>
- SolidWorks CSWA Certificate
- HKIE Scheme-A Training
- LD Safety Officer Course

## ORGANIZATION

POLYU IC

IC has 6 <u>technical streams</u> and a service support team. Our 6 technical streams specialize in different disciplines, technologies and expertise.





AM

ADDITIVE MANUFACTURING

STREAM

BCS

BUILDING SERVICES,

CONSTRUCTION & SAFETY

STREAM

COMPOSITES &
FABRICATION STREAM





DM

DIGITAL MANUFACTURING

STREAM

ELECTRONICS &
INTELLIGENT AUTOMATION
STREAM

EIA

TECHNICAL SERVICES
STREAM

TS

### **SERVICES**

### POLYU IC

IC serves as a practical training centre for higher education as well as a "Technical Library" providing research support, project support and knowledge transfer for its community.

# HKIE Approved Training Centre

 curriculum-embedded training subjects to over 70 academic programmes to strengthen students' ability to 'learn by doing' and 'learn to learn'

# Professional Certification Training

- CAD HKAR-147 Aircraft
   Maintenance Training
- <u>CIC Certificate of BIM Manager</u>
- SolidWorks CSWA Certificate
- HKIE Scheme-A Training
- Labour Department Safety
   Officer Course

# Theme-based All-round Research Support

- CNERC-Rail
- <u>CNERC-Steel</u>
- PolyU School of Design EV Project
- PolyU HTI & BEEE COVID-19
   Research Project
- PolyU Space Project













# Walk-in Technical Support for Research Staff & Students

 Consultation, machining, fabrication, testing, integration

# Project Base & MakerLabs for Research Staff & Students

- PolyU FSAE Racing Team
- PolyU AIAA Design, Build, Fly
   (DBF) Team
- PolyU Robocon Team
- Project Base for FYP

### Consultancy Services for PolyU & Non-PolyU Community

All-round consultancy services

### **FACILITIES**

### POLYU IC

IC offers an open environment with a <u>complete collection of engineering facilities</u>, <u>equipment</u> <u>and technologies</u> for students, staff and researchers to realize their learning, research and project activities. Over 100 different types of facilities grouped under following different engineering domains are available for use and <u>booking</u>.



3D PRINTING



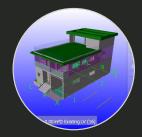
SURFACE ENGINEERING



METAL & PLASTICS



MATERIAL TESTING



**BUILDING SERVICES** 



CONSTRUCTION &



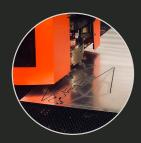
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COMPOSITES



WELDING



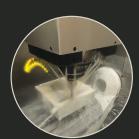
PERFORMANCE STRUCTURE



CAD & REVERSE ENGINEERING



CONVENTIONAL MACHINING, MEASUREMENT & ASSEMBLY



CNC & FDM



ADVANCED MEASUREMENT



ELECTRONICS & INTELLIGENT AUTOMATION



DESIGN REALIZATION



FACILITY BOOKING

## PROJECT PORTFOLIO

### POLYU IC

Our six 6 technical streams covering the core and contemporary areas and expertise enable us to realize research breakthroughs, inventions and novel ideas from lab to life and for industries ranging from engineering, transportation, manufacturing, infrastructure, utilities, aviation to health care. Our Technical Service Stream serves as the guide for new users.



SURFACE SAMPLING & PACKING SYSTEM

Change 5 Lunar Exploration Mission



CAMERA POINTING SYSTEM

Chang'e 3 & Chang'e 4 Lunar Exploration Mission



MARS LANDING SURVEILLANCE CAMERA

Mars Exploration Mission



TRANSCATHETER AORTIC VALVE IMPLANTATION SIMULATION SYSTEM

Queen Elizabeth Hospital



NOVEL BRAIN TRAINING
DEVICE

Post Stroke Limb Rehabilitation



ACID DEPOSITION
MONITORING NETWORK

HKSAR Environmental Protection

Department



GET OUR RESEARCH SUPPORT

# **INDUSTRIAL CENTRE** THE HONG KONG POLYTECHNIC UNIVERSITY











