

ENGLISH TRAINING IN ENGINEERING (ETIE)



Chenn Q. Zhou

Professor and Department Head of Mechanical Engineering

Director, ETIE Program

czhou@purdue.edu

PUC ENGINEERING

**POWERING
RESEARCH**



INTRODUCTION

- Established in 2006
- To provide outstanding international engineering students an opportunity to enhance their English skills and to study advanced engineering courses at Purdue University Calumet (PUC).
- Current partnerships with top Chinese universities:
 - ✓ Beijing University of Technology (BIT)
 - ✓ Central South University (CSU)
 - ✓ Nanjing University of Aerospace and Aeronautics (NUAA)
 - ✓ Sichuan University (SCU)
 - ✓ University of Electronic Science and Technology of China (UESTC)

PUC ENGINEERING

**POWERING
RESEARCH**

*MORE POWERFUL
THAN A LOCOMOTIVE*



ETIE PROGRAM TYPE A (3+1)

- Students: Current Junior
- Time: Fall and Spring semesters (August to May)
- Minimum course requirements per semester
 - ✓ 1 English course (3 credits)
 - ✓ 1 Senior design (3 credits)
 - ✓ 2 Engineering courses (6 credits)
- Undergraduate degree from home Universities
- ETIE Certificate from PUC
- GRE is waived for admission to Master of Science in Engineering (MSE) Program at PUC

ETIE PROGRAM TYPE B (4+0.5+1)

- Students: Current seniors or Graduate Students
- Time: One or two semesters
- Minimum course requirements per semester:
 - ✓ 1 English course (3 credits)
 - ✓ 3 Engineering courses (9 credits)
- ETIE Certificate from PUC
- GRE is waived for admission to MSE Program at PUC
- Up to 4 graduate level engineering courses can be count for MSE degree

ADMISSION REQUIREMENTS

- Outstanding students with the proof of English proficiency
- Majors
 - ✓ Computer and Software Engineering
 - ✓ Civil Engineering
 - ✓ Electrical Engineering
 - ✓ Environmental Engineering
 - ✓ Mechanical Engineering
 - ✓ Mechatronic Engineering
 - ✓ Material Engineering
 - ✓ Thermal Energy Engineering

MSE GRADUATE PROGRAM

- English requirements:
 - ✓ TOEFL: 77 internet-based test score with writing 18, speaking 18, Listening 14, and reading 19
 - ✓ IELTS: 6.5
- GPA: 3.0/4.0 (B average)
- Graduation requirements:
 - ✓ 30 Credits (10 courses) with GPA of 3.0/4.0 or better
 - ✓ Optional independent research studies or thesis research up to 9 credit hours

ETIE DATA

- 159 students received ETIE Certificates since 2006
- 81% (128 students)) continued at PUC for MSE degrees
 - ✓ 81% of 128 students worked as RA, TA, or student workers
- 47 students received MSE degree from PUC
 - ✓ 13 students are studying for PhD
 - ✓ 11 students are working in the U.S. companies
 - ✓ 15 students are working in China
- Research awards and papers
 - ✓ 9 students received research awards
 - ✓ 28 students attended international conferences
 - ✓ 25 students have paper publications

PUC ENGINEERING

**POWERING
RESEARCH**



*MORE POWERFUL
THAN A LOCOMOTIVE*

ETIE OUTCOMES

■ Examples of other universities where ETIE students are studying for PhD or Master degrees

- ✓ Arizona State University
- ✓ Columbia University
- ✓ Duke University
- ✓ Harvard University
- ✓ Illinois Institute of Technology
- ✓ Missouri University of Science and Technology
- ✓ New York University
- ✓ Purdue University West Lafayette
- ✓ The State University of New York at Buffalo
- ✓ University of South California
- ✓ North Carolina State University
- ✓ Northeast University
- ✓ University of North Carolina
- ✓ University of California at Davis
- ✓ University of Iowa
- ✓ University of Utah
- ✓ The University of Tokyo
- ✓ Nanyang Technological University
- ✓ GISMA Business School, Germany
- ✓ RWTH Aachen, Germany
- ✓ University College London



WHY ETIE ?

- Significant improvement of English
- Exceptional hands-on experience
- Great research experiences
- Excellent engineering faculty
- Prestige Purdue engineering degrees
- Opportunities for RA, TA, student workers, and internships
- Opportunities for international competitions such as Moon Buggy, Mini Baja, etc.
- Low cost
- Good location

www.calumet.purdue.edu/engr/etie

PUC ENGINEERING

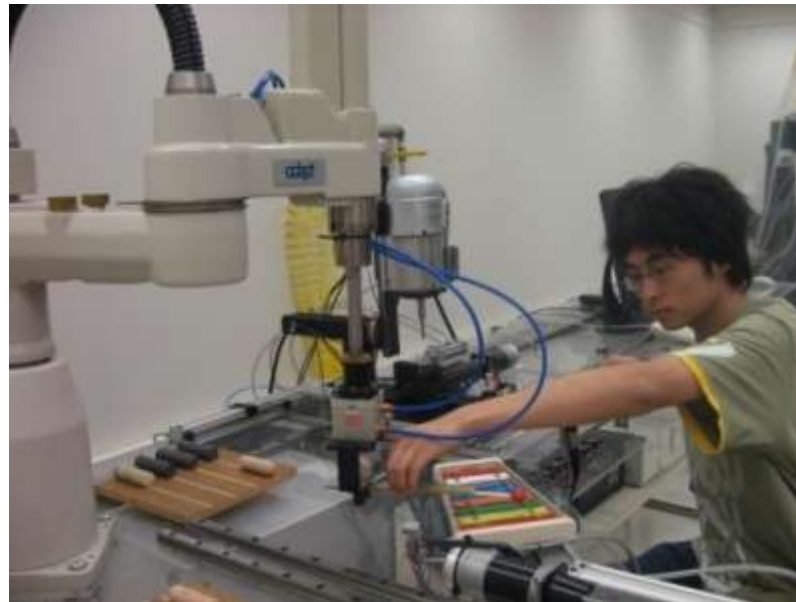
**POWERING
RESEARCH**

*MORE POWERFUL
THAN A LOCOMOTIVE*



ETIE STUDENT FEEDBACKS

- ✓ *“I learned how to do research and how to write a journal paper. I made lots of friends with American people.” – Xu Li, NUAA*



PUC ENGINEERING

**POWERING
RESEARCH**



ETIE STUDENT FEEDBACKS

- ✓ *“We can take TOEFL and GRE after we enter the US ”. – Xia Huang, CSU*
- ✓ *“You will get more credits compared with the students directly apply from China” – Zian Zhang, BIT*



PIIC ENGINEERING

POWERING
RESEARCH

MORE POWERFUL
THAN A LOCOMOTIVE

ETIE STUDENT FEEDBACKS

- ✓ *“We have more research opportunities here”. – Xuan Zhang, SCU*
- ✓ *“This experience is of great value for my PhD study.” - Xiaoyan Xu, CSU*



ETIE STUDENT FEEDBACKS

- ✓ *“ETIE program gave me a new home, gave me a big new family.” – Yubin Zhou, BIT*



PUC ENGINEERING

**POWERING
RESEARCH**

**MORE POWERFUL
THAN A LOCOMOTIVE**

ETIE STUDENT FEEDBACKS

- ✓ “很高兴自己能够参加ETIE项目. 在PUC做毕业设计时期, ETIE这个项目给我们创造了和美国教授沟通交流的机会, 学习了很多关于在美国如何做研究的经验” – Tian Jiang, BIT



ETIE STUDENT FEEDBACKS

- ✓ “ETIE项目为我们提供一个很好平台，无论为以后留美学习还是工作都打下了基础。通过这个项目，我们不仅学到了实用的技能更加深对美国文化的认识，使人更快的成熟成长起来。”- Shan Ren



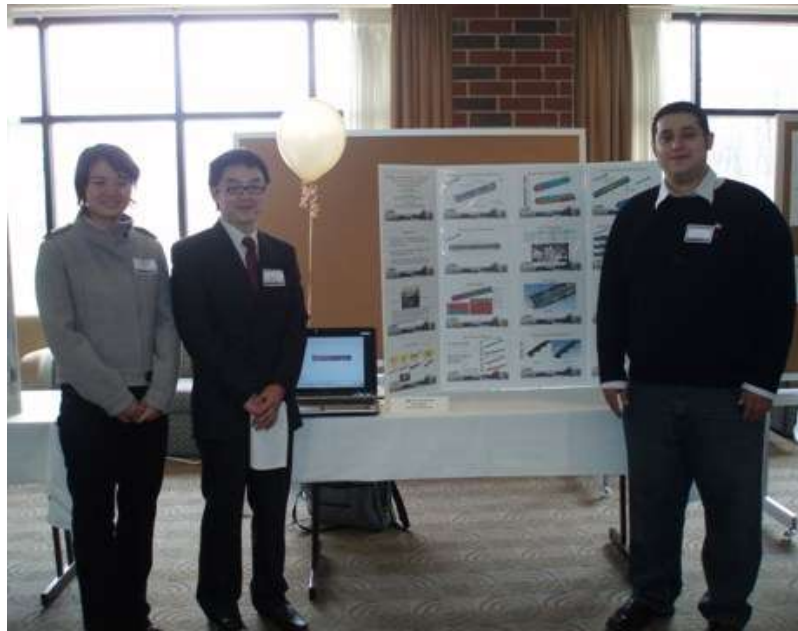
PIIC ENGINEERING

POWERING
RESEARCH

MORE POWERFUL
THAN A LOCOMOTIVE

ETIE STUDENT FEEDBACKS

- ✓ “大四一年在普度学习时光很快乐，也很辛苦。正是这段经历让我后来渐渐喜欢上了所做的工作，所以决定投身于这方面的研究。在研究生的学习中能乐在其中。”
– Dong Fu, BIT



PUC ENGINEERING

**POWERING
RESEARCH**



ETIE STUDENT FEEDBACKS

- ✓ “这里有较好的师资和研究条件,正因为如此,才可以让我在3年的时间内有5篇论文。对于那些准备读PHD的同学, ETIE也是个很好的跳板。在这,有一个国内无法比拟的好处,可以直接去找教授面谈,这样会更容易给教授留下印象,在申请的过程中往往会起到决定性的作用”。
- Wei Wu, BIT



PUC ENGINEERING

POWERING
RESEARCH



ETIE STUDENT FEEDBACKS

- ✓ “ETIE项目对自费出国留学来说一个物美价廉的项目。说她物美，是因为她能提供学生优质的科研条件,为中国学生提供一个从单纯的理论学习到注重实际应用的转变平台，说她价廉，因为相对于其他的留学项目，ETIE项目是最省钱中的一个。ETIE项目有一套完善的管理系统，从接机那一刻开始，学生便能感觉到ETIE这个大家庭的温暖”。Weizhuo Zhao, CSU



PUC ENGINEERING

POWERING
RESEARCH



ETIE STUDENT FEEDBACKS

- ✓ “偶然的机会加入ETIE这个项目，让自己获得了去面对更多机会和挑战的机会，感觉自己像一棵小树，从下向上慢慢展开枝叶，逐渐繁茂。但是永远不会忘记自己最初的根基，确是从ETIE这个平台上生长出来的。” – Bin Wu, CSU



PUC ENGINEERING

POWERING
RESEARCH

MORE POWERFUL
THAN A LOCOMOTIVE

ETIE STUDENT FEEDBACKS

- ✓ “我学会了独立自主,懂得了如何更有效率的学习和工作。
EITE每年举办的各种活动丰富了我们的生活,尤其是春晚,
为我们在外的学子创造了在家的幸福与温暖。同时,ETIE老
生和社区华人对新生的帮助使得新生能够更快的适应在美的
生活。” - Niana Zhou, CSU



PUC ENGINEERING

**POWERING
RESEARCH**



ETIE STUDENT FEEDBACKS

- ✓ “美国的教育制度很好，学校就像一个服务机构，能够尽量解决我们的困难。虽然我们这个校区不大，但是感觉学的东西其实也不少。ETIE提供我们一个很好的平台，让我们能够展翅飞翔”。 - Hao Shen, BIT



PUC ENGINEERING

POWERING
RESEARCH

MORE POWERFUL
THAN A LOCOMOTIVE

ETIE STUDENT FEEDBACKS

- ✓ “这里的毕设与国内的不同，要做两个学期，也就是一个学年，SeniorDesign是对自己大学所学知识的综合与应用。我的导师在整个的毕设过程中给了我很多的帮助，记得那时候每个星期都要与导师讨论毕设问题。另外，这里的SeniorDesign是团队协作的”。 - Bai Lin, BIT



PUC ENGINEERING

POWERING
RESEARCH



ETIE STUDENT FEEDBACKS

- ✓ “首先我觉得是教授们都非常友好，也非常耐心，我能从每位教授那里得到很多的知识，他们在学术上一丝不苟的精神也让我非常敬佩。第二点我想就是PurdueCal这个大家庭，学长学姐们早就准备好了为我们提供帮助，中国学生会还会经常组织各种活动，让大家在美国学好玩好。最后我觉得就是学校提供的各种服务，比如CareerServiceCenter和WritingCenter”。 - Xuesi Wang, BIT



PUC ENGINEERING

**POWERING
RESEARCH**



ETIE STUDENT FEEDBACKS

- ✓ “有着届届优良传统的ETIE项目，无疑是最省心的出国项目。在这里不会孤单，也不会无助。这样的凝聚与团结也是未来过河的一叶扁舟，登高的一把扶梯！ - Ye Shi, BIT
- ✓ ETIE 梦想起飞的地方！ - Zhiyuan Li, UESTC



PUC ENGINEERING

**POWERING
RESEARCH**





PUC ENGINEERING

**POWERING
RESEARCH**



**MORE POWERFUL
THAN A LOCOMOTIVE**