

**Computer Aided Design Lecturer**

**Positions:** Full Time, Tenured – preferably commencing in Feb 2008  
**Salary Grade:** Academic Staff Member

**BACKGROUND INFORMATION**

Christchurch Polytechnic Institute of Technology (CPIT), the largest South Island Polytechnic and one of Canterbury’s three major tertiary institutions, is located in the centre of Christchurch city with an additional campus in Opawa. Emphasis is on “applied” learning where theoretical education is combined with a hands-on approach – the success of which is born out by the number of employers who prefer CPIT-trained employees.

CPIT welcomes approximately 30,000 student enrolments each year including both full and part-time, domestic and international, professional, paraprofessional or trades focussed. Students and staff of a myriad nationalities attend throughout the year during the day, evening or weekend. Te Wānaka o Ōtautahi provides a place of belonging for those wanting to engage the Māori world or Te Whale Pasefika.

Over 1800 staff teach and support learning in vocational programmes and courses across a comprehensive range of career and subject areas at varying levels from foundation to degrees, graduate diplomas, diplomas and certificates to short term modules and courses customised for business, industry or special interest clients.

A challenging education environment demanding responsiveness to the diverse needs of students, employers and our region makes CPIT a dynamic and engaging place in which to work.

Our Computer Aided Design programmes include a Diploma and Diploma in Advanced Computer Aided Design (NZQA levels 6 and 7), a Certificate in Computer Aided Design (level 4) and numerous short courses in CAD. Our graduates learn to apply CAD in a range of areas, typically Engineering, Architecture, or Landscape. Our primary CAD software platform is the range of AutoDesk products, with some involvement of other software. We also have computer aided manufacturing facilities (CAM) and see this as a strategic area for future development.

**PROFILE**

The successful applicant will have the following attributes:

<i>Attribute</i>	<i>Minimum requirement</i>	<i>Preferred</i>
<b>Education</b>	The minimum requirement is a level 6 qualification (e.g. Diploma or NZCE). Alternatively a vocational qualification with extensive experience and completion of additional courses at a higher level.	Qualification will preferably be a technology or engineering degree (level 7 or above).
<b>IT literacy</b>	IT skills at the level of a proficient user of Windows XP with the capacity to quickly update.	Some expert user skills would be advantageous, e.g. but not limited to VBA, software programming, G code, hardware configuration, or networking.

<b>Technology skills</b>	Experience using both 2D and 3D solid modelling computer aided design software, as demonstrated by advanced modelling skills.	Preferably experience with PTC Pro Engineer ®.
	Ability to learn new software skills, especially the ability to master other CAD software and keep abreast with new CAD developments, as demonstrated in ability to use multiple CAD applications or self-learning.	Skills in multiple software packages.
<b>Design experience</b>	Professional experience in draughting, manufacturing, mechanical engineering, or design, as demonstrated in a portfolio of projects undertaken. Applicants with skills in other CAD-related areas will also be considered.	Mechanical product or special purpose machine design.
<b>Teaching skills</b>	At minimum an awareness of the factors necessary for good teaching. Leadership skills – recognises and acknowledges the contributions of others. Motivates and empowers others. Sets standards of behaviour.	Preferably some proven teaching skills
<b>On-line teaching skills</b>	Excellent internet skills	Preferably some experience eg as a student having done an on-line course or study by correspondence.
<b>Research skills</b>	Capability to develop personal research outputs in the medium term.	Demonstrable research outputs, e.g. articles in technical magazines, delivered paper at conference.
<b>Flexibility and innovative ability</b>	Adapts and responds well to change. Manages pressures effectively and copes with setbacks. Open to new ideas and experiences. Handles situations and problems with innovation and creativity. Seeks learning and improvement opportunities.	Energetic, project based approach, and self starter.
<b>Interpersonal skills</b>	Communicates effectively with individuals, groups, clients and staff. Communication skills enhance relationships eg uses humour appropriately. Projects credibility.	Preferably very effective communication and networking skills. Able to influence or persuade people at all levels. Responds readily to the needs of an audience.
<b>Thoroughness</b>	A commitment to participating in academic programme administration.	Experience in development of teaching resources and academic programme administration
<b>Organisational fit</b>	Has a positive outlook at work. Willingness to commit to CPIT's staff profile which encompasses bicultural, international, disability, and environmental awareness; health and safety; IT literacy; innovation, flexibility and continual learning; a focus on students, learning and teaching. Shows respect and sensitivity to differences.	Evidence of good organisational citizenship at previous employer. Experience within tertiary education.

Applicants are invited to include a statement addressing these attributes.

## **RESPONSIBLE TO**

Head of School

## **PRIMARY OBJECTIVES**

- Teach a range of designated courses within Engineering programmes, particularly CAD courses.
- Provide expertise for selected software platforms.
- Participate in the further development of courses, delivery material, and new programmes.
- Develop and deploy distance delivery material for CAD.
- Liaise with industry on CAD matters, including providing expert support.
- Participate in projects developed in the School of Engineering.
- Undertake other teaching and academic duties as the Head of School may direct.

### **1 Teaching**

The primary duty is teaching in the section. The Academic Staff Member will be expected to teach generic courses in CAD on the various programmes offered and with time to become the subject specialist for selected courses, e.g. in PTC Pro Engineer ® 3D parametric modelling, CAM, etc., based on professional abilities and the needs of the School.

Teaching tasks include but are not limited to:

- 1.1 Develop teaching material, sometimes for new courses.
- 1.2 Develop on-line resources.
- 1.3 Teach classes (face to face and by distance). Prepare and provide learning opportunities for students, which meet curriculum requirements and enable students to meet learning outcomes for the course/programme.
- 1.4 Provide student feedback that assist learning processes.
- 1.5 Assess student work within prescribed standards so that there is confidence in the degree of learning and extent to which students have attained the learning outcomes.
- 1.6 Engage in teaching and professional practices which ensure quality assurance requirements are met. Includes moderation.
- 1.7 Provide information about CPIT and support the “whole CPIT” learning experience.

### **2 Administration and Liaison**

- 2.1 Prepare documentation for courses/programmes as required. This includes material development and may include curriculum design and development.
- 2.2 Complete records, marks and attendance documentation as required.
- 2.3 Participate in teams in order to coordinate course/programme/student issues and provide quality learning experiences in the School/Faculty/CPIT contexts.
- 2.4 Undertake course coordination and other coordination and administrative duties as required.
- 2.5 Contribute to School and other team meetings.
- 2.6 Maintain professional relationships with staff and students.
- 2.7 Keep current in and follow CPIT policies and procedures.
- 2.8 Develop and maintain constructive liaison with industry.

### **3 Professional Development, Research and other Scholarly Activities**

- 3.1 In support of professional and teaching development and CPIT's strategic goals, take part in professional development activities, research and other scholarly activities as agreed with the Head of School.
- 3.2 Maintain and grow personal competencies in specialist areas.

## **FOR YOUR FURTHER INFORMATION**

### **1 Student Evaluation**

Each lecturer is required to implement a system of obtaining from students, evaluation on the course in general and on their performance to assist professional development. Assistance is available in the School or through the Staff Development Coordinator.

### **2 Staff Appraisal**

CPIT has in place a negotiated system of staff appraisal in relation to job performance. All staff are to take part in appraisal.

### **3 Probationary Period**

Every lecturer appointed for the first time to a tenured (permanent) position must serve a probationary period of two years, which may be reduced in certain circumstances or extended for up to a further year. People appointed to limited tenure (fixed term) positions may be required to serve a probationary period. Confirmation of appointment at the end of the probationary period is by the decision of the Chief Executive Officer communicated in writing.

### **4 Staff Training**

Academic staff who do not have a teaching qualification are required to enrol in the Certificate of Adult Teaching.

### **5 CPIT Profile**

For CPIT to develop and prosper, all staff are expected to demonstrate a range of skills, knowledge and attitudes that contribute positively to the organisation's fundamental purpose which is to provide quality learning for students. We have an integrated approach to defining, describing and developing a positive learning culture among staff and we align this approach at all levels to the mission, values, goals and strategic direction of the institution.

### **6 Health and Safety**

Applicants for positions are asked to declare and relevant health related needs or issues on the Confidential Information form provided to Human Resources with your application for appointment. This information is not used for short listing but we do expect you to discuss your needs as part of the interview process or when accepting an employment offer where this is relevant. Confidentiality is assured and applicants will not be differentiated on the basis of disabilities or health requirements unless these render applicants unable to undertake the task requirements. Employees may be required to undertake a health check where baseline data is needed for specific positions. Eg a hearing test for those involved in engineering workshops.

### **7 Employment Terms and Conditions**

Appointment is within the terms of the employment law and for the first 30 days of employment CPIT is legally required to employ staff on the terms and conditions of the Academic Staff in Tertiary Education Collective Agreement (ASTE).

At CPIT we also have another collective employment agreement which covers the terms and conditions of employment for academic staff members. It is negotiated by the Association of Teachers in Tertiary Institutes (ATTI). The law provides that after the first 30 days of employment, staff may join this union.

If the staff member joins a union (ASTE or ATTI), the terms of that union's collective agreement applies. If the staff member decides to not join a union, s/he remains on an individual agreement and we can mutually agree terms and conditions.

These rules are prescribed by the Employment Relations Act 2000. Our Human Resources Advisors are able to provide information as to choices where these apply, and staff members' rights and contractual obligations.

Commencing salary will depend on the appointee's qualifications and experience, and the particulars of the applicable agreement and the grade of the position. For this position an appointment may be made to the Academic Staff Members' (ASM) grade where the maximum salary currently is \$59,165 (ASTE Agreement). Only in unusual circumstances is an applicant likely to be assessed at the top of this range on first appointment.

## **APPLICATION DETAILS**

Applications for Appointment forms must be marked:

**Computer Aided Design Lecturer**

**Ref: FT 3076**

Applications should be addressed to:

Senior HR Advisor  
Christchurch Polytechnic  
Institute of Technology  
P O Box 540  
**CHRISTCHURCH**

Email [hr@cpit.ac.nz](mailto:hr@cpit.ac.nz)  
Phone (03) 940 8623  
Fax (03) 940 8616

and forwarded by email, post, fax or in person.

***Applications Close***  
***01 February 2008***

*The standard application form attached provides the Institute with a common set of information about each candidate but applicants should not limit themselves to that form. Personal applications set out in the applicant's own style including a curriculum vitae and particular references to the job description and personal profile are welcomed.*