

Student Prize Awarded by Siemens in the Department of Electronic and Electrical Engineering

Bill Gabb, Industrial Liaison Tutor, Department of Electronic and Electrical Engineering March 2009

The Sir William Siemens Medal is awarded annually to the best student in the Department who has undertaken an industrial training placement and has achieved success both academically and in the placement year.

Reasons for engagement

In 1993 Siemens decided to reintroduce the Sir William Siemens Medal programme originally introduced in 1883. The Medal commemorates the contribution of Sir William Siemens to science and technology and the aim of the programme is to promote an interest in these subjects among young people and reward excellent achievement. Siemens award a Medal and a cheque for £300 to the top science and technology students from 18 leading UK universities each year.

Loughborough University is one of the universities chosen as it is regarded as having one of the leading Electronic and Electrical Engineering departments in the UK.

The engagement

The criteria for awarding the medals are set by the University and approved by Siemens. The only criteria set by Siemens is that the winner will be studying towards their undergraduate degree when they collect the medal. The medal winners and their tutor meet for a national presentation day where they receive their engraved medal and cheque.

In the Department of Electronic and Electrical Engineering at Loughborough University the Medal is awarded to the student who has made an outstanding contribution during their industrial placement. The Award is based on a proposal from the placement company supported by the visiting tutor and the students own reports and submission.

In January 2009 the Siemens Medal was awarded to Ryan Bakewell. Ryan is a student on the MEng Systems Engineering programme. He was on placement with BAE Systems, most of it with the Autonomous Systems and Future Capability section of the Military Air Solutions division. Ryan was involved in two major projects concerning autonomous vehicles. The Hero, a ground based wheeled vehicle that can be used for inspecting the underside of trucks and other large vehicles. The other centred around a launch mechanism for small unmanned autonomous vehicles (Project Artful).

Ryan played a key role in a month long technical trial of the Hero vehicle and acted as Chief Engineer on the unmanned autonomous vehicle launcher project

where he managed a small team. Ryan was awarded a Bronze BAE Chairman's Award for his contribution to the Hero vehicle and a Bronze and Silver BAE award which he received in December 2008 in Washington DC, USA.

Issues

Some years it can be difficult deciding which student should be awarded the prize. The department sometimes struggle to decide which student to nominate for the award. The lecturers look for those students who have patents, papers published or publications and other external awards achieved. The staff have to distinguish how much an achievement is due to the individual student and to the team they are part of. Visits to the students on placement are also useful in determining which students have performed well.

Development of soft skills, often the students who have the best soft skills are the ones that often perform the best on their placement. The students sometimes need to use diplomacy when dealing with their colleagues and managers in industry. Sometimes need to challenge how things are done in the company.

Benefits

The department maintains a good relationship with Siemens and other companies who recruit students for industrial placements. Siemens also look to raise the awareness of students and graduates of Siemens as an employer. During the award ceremony Siemens employees meet with some of the leading engineering students in the UK which allows them to promote career opportunities within the company.

Students have the opportunity to meet people from Siemens and to find out more about the variety of future career options.

Academic/Industrialist/Student perspective

The award increases the profile of industrial placements in the department and University. The student gains recognition for their achievements whilst on placement and a cash prize. Siemens gain positive media coverage, encouraging young people to study science and technology.

Reflections

I recently created a new annual review document for companies to record how students have made an impact during their placements. This should make it easier for staff in the department to decide who should receive the award.

Context

Bill Gabb is the Industrial Liaison Tutor in the Department of Electronic and Electrical Engineering. He studied at Aston University and worked on Rapid Transit Systems as a Development Engineer at GEC Traction in Manchester. He joined Loughborough University in 1980 and is involved in the teaching of digital electronics in the department.

Siemens is a global company with around 400,000 employees working to develop and manufacture products, design and install complex systems and projects, and tailor a wide range of solutions for individual requirements. Siemens started operating in the UK in 1843. Among its early significant achievements were laying the first telegraph cable that linked Britain with the U.S., installing the first electric street lighting, designing the first water meter, and providing the first public railway. Further information about Siemens and the Sir William Siemens Medal is available at www.siemens.co.uk