

*"The School of Aeronautical Engineering...works closely with industry, notably Bombardier, Thales...and BAE Systems, enabling its students to benefit from a culture of enterprise and innovation."*¹

- Queen's University Belfast website

Queen's University Belfast Military Projects 2001 - 2006

Overall Statistics

Total no. of projects	Minimum amount received from Projects	Ranking by: a) no. of projects b) amount (£)	Top 3 funders (by no. of projects)	Top 3 departments (by no. of projects)
37	£2,058,946	a) 18th b) 22nd	1=) BAE Systems 1=) Rolls Royce 2=) QinetiQ 2=) EPSRC	1) Electrical and Electronic Engineering 2) Mechanical and Aerospace Engineering 3) Civil Engineering

School of Civil Engineering

Source/ Sponsor/ Partner	Project	Amount	Date
EPSRC, Dstl (Fort Halstead) and others	Isotope Profiling of Drugs: A Tool to Disrupt Organised Crime, Detect Serious Crime and Reduce Volume Crime	£113,590	March 2006 – Feb 2009 ²
Rolls Royce, EADS and others	Optimisation of Turbine Forging Process: Using Finite Element Analysis	£?	Current as of Dec 2006 ³
EADS and others	Integrating CAE and Virtual Reality in the ViSiCADE Project	£?	Current as of Dec 2006 ⁴

School of Computer Science

Source/ Sponsor/ Partner	Project	Amount	Date
QinetiQ	Grid Security Test Bed	£29,530	Mar 2004 – Dec 2004 ⁵

School of Electrical and Electronic Engineering

Source/ Sponsor/ Partner	Project	Amount	Date
Astrium UK	Low Loss MM-Wave Frequency Select Surfaces within Photonic Structures Research	£?	March 2001 – Current ⁶
QinetiQ	High Level Design Methodologies for the	£67,670	Oct 2001 – Sept 2004 ⁷

	Implementation of High Performance Heterogeneous Architectures (Studentship)		
QinetiQ	Design Methodologies for Next Generation Digital Signal Processing Systems (CAST Studentship)	£16,800	Oct 2002 – Sept 2005 ⁸
QinetiQ	Senior Fellow in the Advances Signal Processing Group visiting Professor to Electrical Engineering	£?	2004 ⁹
Rolls Royce	PhD Grant: Wavelets for Stress Engineering Data Analysis, Research Opportunities	£?	2004 – 2007 ¹⁰
Belfast e-Science Centre and QinetiQ Plc	GridMIL: Exploring the Potential Application of Grid Technology in the Military Domain	Pilot Funding of £20,000	May 2004 ¹¹
BAE Systems	High Performance Architectures for Multi Channel Sensors (CASE Studentship)	£8,500	Oct 2004 – Sept 2005 ¹²
BAE Systems Land Systems, Weapons and Vehicles	Offered: Industrial Placements for Electrical Engineer (1), Mechanical Engineers (3), Systems Engineer (1) and Software Engineer	£13,250 to £15,000 each	Summer 2006 for 12 months ¹³
BAE Systems	Offered: Project Management Engineering (Submarines) – Industrial Placement	£13,520 to £15,600 pa.	Summer 2006 for 12 months ¹⁴
BAE Systems, QinetiQ, Space and Naval Warfare Systems Command and others	Northern Ireland Semiconductor Research Centre	£?	Current as of Dec 2006 ¹⁵
Thales and others	Millimetre-Wave MMIC (Microwave Monolithic Integrated Circuits) Mixer Design, High Frequency Electronics Group	£?	Current as of Dec 2006 ¹⁶
EADS Astrium Space UK, EPSRC and others	Sub-MM Wave and THz Quasi-optical Filter Technology, High Frequency Electronics Circuits, the Institute of Electronics, Communications and Information Technology (ECIT)	£?	Current as of Dec 2006 ¹⁷
EPSRC, EADS Astrium Space UK and others	Liquid Crystals Phase Shifters, High Frequency Electronics Circuits, ECIT	£?	Current of Dec 2006 ¹⁸
EPSRC, and QinetiQ (Portsmouth)	MIMO Radar	£?	Current as of Dec 2006 ¹⁹
US Air Force, and European Office of	Conformable Antenna Elements for Advanced Wearable	£?	Current as of Dec 2006 ²⁰

Aerospace Research and Development (EOARD)	Communications Under Hostile Channel Conditions		
BAE Systems, QinetiQ and others	Programmable Systems Research, The Institute of Electronics, Communications and Information Technology	£?	Current as of Dec 2006 ²¹
EADS Astrium and others	PhD Studentship in Ultra Low Loss Frequency Selective Surface (FSS) Filters within High Frequency Electronics	£?	Current as of Jan 2007 ²²

School of Management and Economics

Source/ Sponsor/ Partner	Project	Amount	Date
Thales	BSc Finance Placement at Thales Avionics, Paris	£?	2004 - 2005 ²³

School of Mathematics and Physics

Source/ Sponsor/ Partner	Project	Amount	Date
EPSRC and Dstl	Energetic Protons & Ions from High Intensity Laser Plasma Interactions	(EPSRC) £216,569 (Dstl) Approx. £700,000	July 2005 – June 2008 ²⁴

School of Mechanical and Aerospace Engineering

Source/ Sponsor/ Partner	Project	Amount	Date
Rolls Royce and others	Manufacture and Modelling of Fabricated Structural Components	£180,000	2000 - 2003 ²⁵
Thales Air Defence Ltd	Hire of Equipment and use of Facilities	£2,600	2002 ²⁶
Rolls Royce Plc	Design for Fabrication Tools using Appropriate Process Modelling (CAST Studentship)	£24,000	Jan 2002 – Dec 2004 ²⁷
Thales Air Defence Ltd and others	Active Flow Control for High Speed Projectiles. CASE Studentship included as part of this programme	£50,000 £24,000 of which was for CASE Student	2004 - 2007 ²⁸
EPSRC and BAE Systems	Network Enabled Capability	£350,000	2005 – 2010 ²⁹
Rolls Royce Plc	3D DieShape Optimisation for Net Shape Forging of Aero Engine Compressor Blades	£14,000	Feb 2005 – Jan 2007 ³⁰
BAE Systems, Boeing, Thales and others	Conference organised by the Centre for Excellence for Integrated Aircraft Technology: 1 st International Conference on	£?	August 2005 ³¹

	Innovation and Integration in Aerospace Sciences		
EPSRC and Rolls Royce Plc	3D Die Shape Optimisation for Net-Shape Forging of Aeroengine Compressor Blades	£238,917	Aug 2005 – Jul 2008 ³²
Rolls Royce Plc	Offered: 3D Die Shape Optimisation for Net-Shape Forging of Aeroengine Compressor Blades PhD Studentship	£?	Oct 2005 – Oct 2008 ³³
Rolls Royce	BEng and MEng Mechanical Engineering Student Work Placements Available	£?	2006 ³⁴
Thales Air Defence Ltd	Offered: Guidance Of Supersonic/ Hypersonic Projectiles using Pin-Based Actuators PhD Studentship	£?	Oct 2006 – Oct 2009 ³⁵
Rolls Royce Plc	Simplified Welding Simulations for Aero-engine Components	£?	Current as of Dec 2006 ³⁶
EADS and others	Model Simplification for Meshing	£?	Current as of Dec 2006 ³⁷
EPSRC, BAE Systems and others	Offered: Systems Engineering Doctorate (EngD). Participating universities include: <ul style="list-style-type: none"> • Loughborough, • Bath, • Leicester, and • Strathclyde 	£4,500,000	Current as of Dec 2006 ³⁸

Other projects/ information of note

Projects with unspecified dates/ departments			
Source/ Sponsor/ Partner	Project	Amount	Date
Belfast e-Science Centre and BAE Systems	Grids and the Aerospace Industry	£?	? ³⁹
Belfast e-Science Centre's potential involvement with Industry & Grid Technologies, Rolls Royce and others	IEC Projects: Integrated Products and Services (IPAS) and BROADEN – Following on from E-science project DAME	£2,500,000 and £3,980,000 (subject to contract)	? ⁴⁰

Project starting 2007, School of Electrical and Electronic Engineering			
Source/ Sponsor/ Partner	Project	Amount	Date
BAE Systems Submarines	Offered: Industrial Placement for Electrical and Electronic Engineering Students at BAE Systems Submarines. Salary based whether	£15,400 or £16,500	July 2007 - July 2008 ⁴¹

	candidates have completed two or three years at university		
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Queens University Belfast's' Chief Executive's Club			
<ul style="list-style-type: none"> Queens University Belfast's' Chief Executive's Club "strives to strengthen links between the University and the wider business community at events where views may be freely expressed and areas of mutual interest discussed." Boasting of 150 members and arranging a placement programme entitled Lecturers into Industry, the group has previously arranged placements at organisations such as Rolls Royce, among others.⁴² 			
Industry Fellowships			
<ul style="list-style-type: none"> Offered on Queens University Belfast's website for the 2006 applications. "The scheme aims to enhance knowledge transfer in science and technology between those in industry and those in academia. It provides opportunities for an academic scientist to work on a collaborative project with industry, or someone employed in industry to work on a collaborative project with a university department or not-for-profit research organisation. It is anticipated that fellows will establish personal and corporate links between the two sectors in the UK as a foundation for their long-term future development." Placements offered for up to two years full time or four years half time. Associated of the scheme include Rolls Royce⁴³. A variation of this is the Northern Ireland Interchange Partner Group, which the Ministry of Defence and QUB participate in.⁴⁴ 			
Engineering, Science and IT Fairs			
<ul style="list-style-type: none"> Engineering, Science and IT Fairs; Work Experience Fairs and the Science and Engineering Careers Symposium. In 2006 organisations listed as attending the Engineering, Science and IT Fair included Bombardier Aerospace, QinetiQ and Thales.⁴⁵ 			
Work experience placements			
<ul style="list-style-type: none"> Many organisations are listed as potentially offering work experience placements, summer work, sandwich year work placements and graduate jobs on QUB's careers service website including BAE Systems, Rolls Royce and Thales. These organisations tend to have an open application process for any university students studying in the UK. 			
Ulster Gift Fund Scholarship			
<ul style="list-style-type: none"> The Ulster Gift Fund Scholarship is available for undergraduate and postgraduate students who themselves, or their parents have served in HM forces.⁴⁶ 			

Notation

? Denotes projects whose value and/ or date we were unable to discover.

Endnotes

¹ "Press Releases 04-2005". Queen's University, Belfast. <http://www.qub.ac.uk/home/TheUniversity/GeneralServices/News/ArchivesPressReleasesCampusNews/2005PressReleases/04-2005PressReleases/>. 8 December 2006.

² "Details of Grant". Engineering and Physical Sciences Research Council. <http://gow.epsrc.ac.uk/ViewGrant.aspx?GrantRef=EP/D040345/1>. 4 December 2006.

³ "Finite Modelling Element Group". Queen's University Belfast. <http://sog1.me.qub.ac.uk/Research/forging/forging.php>. 8 December 2006.

⁴ "Finite Modelling Element Group". Queen's University Belfast. <http://sog1.me.qub.ac.uk/Research/visicade/visicade.php>. 8 December 2006.

⁵ Clare McVeigh. Information Compliance Officer, Queen's University Belfast. 12 January 2007. Sent to Fellowship of Reconciliation.

-
- ⁶ “Low Loss MM-Wave Frequency Select Surfaces”. Queens University Belfast. <http://www.ee.qub.ac.uk/hfe/>. 8 December 2006. And; “Recent Grants”. Queens University Belfast. <http://www.ee.qub.ac.uk/hfe/>. 8 December 2006.
- ⁷ Clare McVeigh. Information Compliance Officer, Queen’s University Belfast. 12 January 2007. Sent to Fellowship of Reconciliation.
- ⁸ Clare McVeigh. Information Compliance Officer, Queen’s University Belfast. 12 January 2007. Sent to Fellowship of Reconciliation.
- ⁹ “The Irish Signals and Systems Conference 2004”. Queens University Belfast. <http://www.issc.ee.qub.ac.uk/ISSC2004%20Programme%20Guide.pdf>. 3 January 2007.
- ¹⁰ “*This research will be conducted in close collaboration with Rolls-Royce plc who will support the project through the visiting professorship (Dr A.J. McMillan) and by providing company engineer’s time and technical data.*” “Wavelets for Stress Engineering Data Analysis”. Queens University Belfast. http://www.ee.qub.ac.uk/control/isac_hpaga/index.html. 8 December 2006.
- ¹¹ “GridMIL,” Belfast e-Science Centre. http://www.qub.ac.uk/escience/dev/article.php?tag=gridmil_summary. 11 December 2006. And; “Grid Computing” Queen’s University Belfast. <http://www.qub.ac.uk/escience/besc%20INI.May19.v31.pdf>. 15 December 2006.
- ¹² Clare McVeigh. Information Compliance Officer, Queen’s University Belfast. 12 January 2007. Sent to Fellowship of Reconciliation.
- ¹³ “Industrial Placements at BAE Systems”. Queens University Belfast. http://www.ee.qub.ac.uk/jobs/placement/placement/2005-2006/bae_systems.pdf. 15 December 2006.
- ¹⁴ “Industrial Placements at BAE Systems”. Queens University Belfast. http://www.ee.qub.ac.uk/jobs/placement/placement/2005-2006/bae_systems.pdf. 15 December 2006.
- ¹⁵ “Industrial Contacts and Collaborators”. Queens University Belfast. <http://www.ee.qub.ac.uk/nisrc/indcol.html>. 8 December 2006.
- ¹⁶ “The High Frequency Electronics Group”. Queens University Belfast. <http://www.ee.qub.ac.uk/hfe/>. 20 November 2007. And; “Millimetre-Wave MMIC Mixer Design,” Queens University Belfast. <http://www.ee.qub.ac.uk/hfe/mmicmix.htm>. 8 December 2006.
- ¹⁷ “Sub-MM Wave and THz Quasi-Optical Filter technology”. The Institute of Electronics, Communications and Information Technology. <http://www.ecit.qub.ac.uk/Home2/Research/HighFrequencyElectronicCircuits/ResearchProjects/SubmmwaveandTHzquasi-opticalfiltertechnology/>. 11 December 2006.
- ¹⁸ “Liquid Crystal Phase Shifters”. The Institute of Electronics, Communications and Information Technology. <http://www.ecit.qub.ac.uk/Home2/Research/HighFrequencyElectronicCircuits/ResearchProjects/Liquidcrystalphaseshifters/>. 11 December 2006.
- ¹⁹ “MIMO Radar”. The Institute of Electronics, Communications and Information Technology. <http://www.ecit.qub.ac.uk/Research/DigitalCommunications/DSPandCommunications/MIMOradar/>. 11 December 2006.
- ²⁰ “Conformable Antenna Elements for Advanced Wearable Communications Under Hostile Channel Conditions”. Institute of Electronics, Communications and Information Technology. <http://www.ecit.qub.ac.uk/Research/DigitalCommunications/RadioCommunication/Conformableantennaeen tsforadvancedwearablecommunicationsunderhostilechannelconditions/>. 11 December 2006.
- ²¹ “Programmable Systems Research”. Queens University Belfast. <http://www.ecit.qub.ac.uk/ResearchDevelopment/System-on-ChipSoC/Programmablesystemsresearch/>. 15 December 2006.

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- ²² “Research Fellow – High Frequency Electronics,” Queens University Belfast, ECIT. <http://www.ecit.qub.ac.uk/SoCaM/AboutUs/Personnel/ResearchStaff/>. 3 January 2007.
- ²³ “BSc Finance Placements 2004-2005”. Queens University Belfast. <http://www.qub.ac.uk/schools/SchoolofManagementandEconomics/Education/Undergraduates/Finance/FinFileUpload/Fileupload,32160,en.pdf>. 3 January 2007.
- ²⁴ “View Grant Details”. Engineering and Physical Sciences Research Council. <http://gow.epsrc.ac.uk/ViewGrant.aspx?GrantRef=EP/C001745/1>. 4 December 2006. And; “High Power Laser Science and Applications at QUB”, Queens University Belfast. <http://www.qub.ac.uk/schools/SchoolofMathematicsandPhysics/plip/TARANISsc.pdf>. 3 January 2007.
- ²⁵ “On 1 August 2005, the School of Aeronautical Engineering was merged with the School of Mechanical and Manufacturing Engineering to form the School of Mechanical and Aerospace Engineering”. “Aerospace Engineering Pathways Student Handbook: Academic Year 2006/2007”. Queen’s University Belfast: School of Mechanical and Aerospace Engineering. <http://www.qub.ac.uk/schools/SchoolofMechanicalandAerospaceEngineering/Education/Aerospace/Resources/Fileupload,51238,en.pdf>. 1 May 2007.
- ²⁶ “Recent Grants”. Queens University Belfast Aeronautical Engineering. <http://www.ea.qub.ac.uk/Research/RecentGrants/>. 3 January 2007.
- ²⁷ Clare McVeigh. Information Compliance Officer, Queen’s University Belfast. 12 January 2007. Sent to Fellowship of Reconciliation. NB Grant to School of Aeronautical Engineering, before merger – see endnote 32.
- ²⁸ “Recent Grants”. Queens University Belfast Aeronautical Engineering. <http://www.ea.qub.ac.uk/Research/RecentGrants/>. 3 January 2007.
- ²⁹ “Recent Grants”. Queens University Belfast Aeronautical Engineering. <http://www.ea.qub.ac.uk/Research/RecentGrants/>. 3 January 2007. And; Clare McVeigh. Information Compliance Officer, Queen’s University Belfast. 12 January 2007. Sent to Fellowship of Reconciliation. NB Grant to School of Aeronautical Engineering, before merger – see endnote 32.
- ³⁰ “Recent Grants”, Queens University Belfast Aeronautical Engineering. <http://www.ea.qub.ac.uk/Research/RecentGrants/>. 3 January 2007.
- ³¹ Clare McVeigh. Information Compliance Officer, Queen’s University Belfast. 12 January 2007. Sent to Fellowship of Reconciliation. NB Grant to School of Mechanical and Manufacturing Engineering, before merger – see endnote 32.
- ³² “1st International Conference on Innovation and Integration in Aerospace Sciences”. Queens University Belfast. <http://www.ceiat.qub.ac.uk/INTERNATIONALCONFERENCE2005/Fileupload,21618,en.pdf>. 15 December 2006.
- ³³ “View Grant Details”. Engineering and Physical Sciences Research Council. <http://gow.epsrc.ac.uk/ViewGrant.aspx?GrantRef=EP/C004140/1>. 4 December 2006.
- ³⁴ “School of Mechanical & Manufacturing Engineering Postgraduate Research Studentships – 2005/06”. Queen’s University Belfast. <http://www.me.qub.ac.uk/news/Stories/2005/03/16/10773782345.php>. 15 December 2006.
- ³⁵ “Queen’s International Student Celebrates win in British Council ‘Shine’ Award”. Queen’s University Belfast. <http://www.me.qub.ac.uk/>. 15 December 2006. And, “Student Profiles” Queen’s University Belfast. <http://www.qub.ac.uk/home/ProspectiveStudents/InternationalStudents/InternationalUndergraduate/StudentProfiles/>. 3 January 2007.
- ³⁶ “Simplified Welding Simulations for Aero-engine Components”. Queen’s University Belfast. http://www.me.qub.ac.uk/research/info/posters_2002/A_Khamassi.pdf. 15 December 2006.

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- ³⁷ "Model Simplification for Meshing", Queen's University Belfast.
http://www.me.qub.ac.uk/research/info/posters_2002/K_%20Lee.pdf. 15 December 2006.
- ³⁸ "Queen's to Offer New Post-Graduate Engineering Course". Queens University Belfast.
<http://www.qub.ac.uk/home/TheUniversity/GeneralServices/News/ArchivesPressReleases/CampusNews/2005PressReleases/10-2005PressReleases/#d.en.19804>. 15 December 2006.
- ³⁹ "Grids and the Aerospace Industry". Belfast e-Science Centre. <http://www.qub.ac.uk/escience/BAE/Belfast-19-May-05.pdf>. 11 December 2006.
- ⁴⁰ "Industry and Grid Technologies". Queen's University Belfast.
<http://www.qub.ac.uk/escience/DrAnne.pdf>. 3 January 2007.
- ⁴¹ "BAE Systems Submarines, Engineering – Electrical Electronic". Queen's University Belfast.
<http://www.ee.qub.ac.uk/jobs/placement/placement/2006-2007/BAE.pdf>. 15 December 2006.
- ⁴² "Regional Office Newsletter Spring/ Summer 2005". Queens University Belfast.
http://www.qub.ac.uk/rrs/webpages/Newsletter_Spring_2005.pdf. 3 January 2007.
- ⁴³ "Industry Fellowships 2006". Queens University Belfast.
<http://www.qub.ac.uk/rrs/webpages/fund/Download/RoySocIF%202006%20advert.doc>. 3 January 2007.
- ⁴⁴ "Interchange Procedure and Guidelines for Academic-Related Staff". Queens University Belfast.
<http://www.qub.ac.uk/appraisal/interchange/Interchange%20Procedure%20and%20Guidelines.doc>.
3 January 2007.
- ⁴⁵ "View Event". Queens University Belfast.
<http://researchnt1.qub.ac.uk/YOPE/students/finalyear/events.asp?Query=viewEvent&ID=224>.
3 January 2007. And; "View Event". Queens University Belfast.
<http://researchnt1.qub.ac.uk/YOPE/students/seekingyope/events.asp?Query=viewEvent&ID=191>.
3 January 2007. And; "Events," Queens University Belfast.
<http://researchnt1.qub.ac.uk/YOPE/students/finalyear/bulletin/bulletin06fy-060316.doc>.
3 January 2007.
- ⁴⁶ "The Ulster Gift Fund Scholarship". Queens University Belfast.
<http://www.qub.ac.uk/directorates/AcademicStudentAffairs/QualityAssuranceandPartnerships/Scholarships/wards/UlsterGiftFund/>. 3 January 2007.