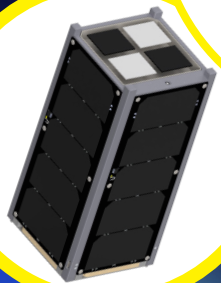
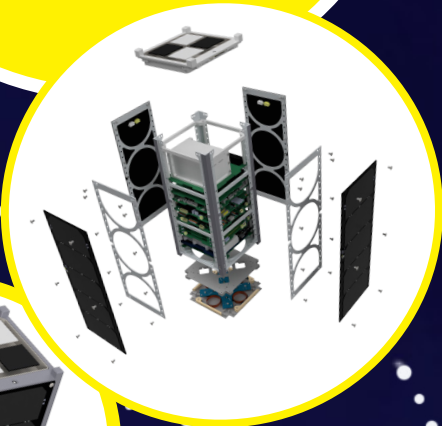




EIRSAT-1 will take new Irish technology into space. GMOD is a detector developed in UCD to measure bursts of gamma-rays from the most violent explosions in the Universe. We will also test the performance of thermal coatings developed by Irish company ENBIO in our EMOD experiment. Additionally the performance of a piece of software called Wave Based Control will be tested to determine how well it controls the movement of EIRSAT-1 in space.



The EIRSAT-1 project is carried out with the support of the Education Office of the European Space Agency, under the educational Fly Your Satellite! Programme.



Rialtas na hÉireann
Government of Ireland



Want to find out more about Ireland's first satellite?

Visit our website www.eirsat1.ie where you can read our blogs and keep updated on our progress.

Have a burning question? Ask us on our forum www.eirsat1.ie/forum or tweet us @EIRSAT1

Space career opportunities are growing each year in Ireland. Find out more about the Irish space industry and Ireland's involvement in ESA:

www.esa.int/ESA_in_your_country/Ireland

www.ucd.ie/spacescience

Courses

The members of the EIRSAT-1 team have different scientific and engineering backgrounds. Some of the courses we studied are:

Undergraduate

DN200 Science - Physics with Astronomy and Space Science, University College Dublin
DN200 Science - Theoretical Physics, University College Dublin
TR063 Physics and Astrophysics, Trinity College Dublin
TR031 Mathematics, Trinity College Dublin
MH204 Physics with Astrophysics, Maynooth University
DN500 Engineering - Mechanical Engineering, University College Dublin
DT021 Electrical and Electronic Engineering, Dublin Institute of Technology

Postgraduate

MSc Space Science and Technology, University College Dublin
MSc Advanced Computational Methods for Aeronautics, Imperial College London

Masters and PhD research degrees in Astrophysics, Engineering and Mathematics

WE'RE BUILDING IRELAND'S 1ST SATELLITE!





MEET SOME OF THE TEAM



"I'm EIRSAT-1's System Engineer which means that I lead the design and assembly of the satellite. It's my job to make sure that all the different parts that are being built by the team work together. Since I'm an astronomer, I have a huge interest in learning about the Universe and building devices that help us to study it. I also lead development of EIRSAT-1's gamma-ray module, known as GMOD. GMOD will test new technology for use in the next generation of orbiting gamma-ray observatories. It's incredible to think that something I helped design and built with my own hands will end up in space! I hope that the work we're doing now will help many more students in Ireland to have the same experience one day."

David Murphy is a student in the UCD School of Physics



"I chose to study Mechanical Engineering because I enjoyed both maths and physics and using them to solve challenging technical problems in creative new ways. I work on the Attitude Control System and Deployable Antenna for EIRSAT-1. It's a dream come true for me to work on a project as exciting as EIRSAT-1 with amazing people from so many different disciplines and to help make history with them by building and launching Ireland's first satellite."

Joe Thompson is a student in the UCD School of Mechanical and Materials Engineering



"I have taken on a leading role on the team, which involved a huge learning curve, doing satellite software development with a group of other UCD students. The software we are now writing will go on to run on EIRSAT-1's on-board computer and will ultimately determine how the satellite behaves while in space. The excitement of this task is matched by its challenges and responsibilities, as we are all taking on completely new roles and learning new skills. It took me a while to get here, but now with each new challenge my confidence grows as I think "ok, I don't know how to do that... YET, but I'll learn!"

Maeve Doyle is a student in the UCD School of Physics



"I lead the Assembly, Integration and Testing of EIRSAT-1. This involves planning how we will build and test the satellite to help ensure that it will perform correctly when operating in space. It's really exciting trying to simulate the harsh space environment in which EIRSAT-1 will operate, so that we can test the satellite here on Earth. I'm eager to meet the challenges of the test campaigns that will take place at European Space Agency test facilities where we'll bring the satellite to get shaken and stirred, heated and cooled, just as it will during launch and in orbit."

Sarah Walsh is a student in the UCD School of Physics



"I work mainly on simulations of EIRSAT-1 in-orbit, as well as the onboard software for our payloads. The simulations tell us how long the satellite will stay in orbit, how much power our solar panels can generate, how much radiation the satellite will absorb, how hot or cold gets, to name a few things. With them

we can make sure our design is the best one for our mission. It's fantastic to watch these numbers on a computer screen turn into Ireland's first satellite, and to know we're blazing a trail for future Irish students."

Conor O'Toole is a student in the UCD School of Mathematics and Statistics



"The data that EIRSAT-1 collects will be communicated to our ground radio station in UCD. I'm responsible for the development of this station and the software that will decode the information that we receive from the satellite. Once in orbit, satellite operators will be monitoring the health of the satellite, sending commands and receiving data from EIRSAT-1 every day."

Lána Salmon is a student in the UCD School of Physics



"Being involved in the EIRSAT-1 mission has opened up doors for me in the European space sector that I could only have dreamed of. To be involved in the development of Ireland's first ever satellite is something that I am truly grateful for and the mission will inspire a lot of young students throughout the country who may not have thought that this was possible. My role involves the design, testing and integration of the EMOD experiment into the satellite. I am testing the different components before flight to ensure that they will survive the launch and the harsh space environment during orbit."

Joe Flanagan is a student the UCD School of Mechanical and Materials Engineering