Why study Science Education?

Science teaching is a very challenging and worthwhile career. Did you enjoy learning about science in school? Do you feel you would like a career in which you spend your time helping young people to succeed? Do you think that you would like the activity of classroom and laboratory teaching? If you have answered 'yes' to these questions, then you should consider a career in science teaching. You may love teaching and become a really inspirational teacher of Science.

Programme Overview

The overall aim of this programme is to ensure that graduates have the knowledge, understanding, professional skills and confidence to be outstanding teachers of science who will inspire pupils in the classroom. Students in First Year take exactly the same subjects as all other students in CK402, CK404, CK406 and CK408. This allows you time to settle into college and decide whether you want a career in science or a career in science teaching. If you decide to opt for a career in science teaching, you register for the
ISc(Ed) in second year.

Your training as a science teacher will take place in the new fully equipped and state-of-the-art science education laboratories in the Eureka Centre for Inquiry Based Education in Science and Mathematics, JCC.

**Work Placement**

When you register for the BSc(Ed) at the beginning of second year, all students study science Education and specialise in either the chemistry stream or physics stream or biology stream. In Second Year, you obtain an introduction to teaching science module ED2101 (Science Education) and also spend ten weeks on Teaching Practice Placement in a local secondary school teaching some science lessons each week under the supervision of a mentor teacher. In third year you take another Science Education module (ED3101) and spend another ten weeks on Teaching Practice Placement.

Your teaching ability, portfolio of prepared lesson plans and a science teaching project all count towards the mark awarded for the science education modules. On successful completion of third year, you proceed to Fourth Year of this honours BSc(Ed) degree. In fourth year you undertake Teaching Practice Placement each morning and each afternoon attend lectures covering the full range of Education topics that are necessary for you to be recognised as a fully qualified science teacher by the Teaching Council.

**Career Opportunities**

This degree programme was initiated by UCC in response to the international shortage of science teachers. Whilst
full-time permanent teaching positions are not plentiful in Ireland, there remains a particular shortage in the supply of teachers of Physics and Chemistry. As this degree has international recognition, graduates have no difficulty finding full time permanent teaching positions overseas.

**Postgraduate Opportunities in UCC**

Graduates of this programme may proceed to the MEd or MEd(Sc) or PhD in education degrees offered by UCC. Graduates may also proceed to an MSc degree or PhD in Chemistry or Physics via the MSc(Qual) or Postgraduate Diploma in Chemistry or Physics routes.

**Recognition by Teaching Council**

This honours BSc(Ed) degree is fully recognised by the Teaching Council as it satisfies the requirements of (i) a minimum of 60 credits in the specialist subject over three years and (ii) a minimum of 10 credits in each of the subjects Chemistry, Physics and Biology. Thus, you are a fully qualified science teacher in four years.

**Direct Entry Route**

Applicants who hold a degree (at least NFQ Level 7 with Merit 1 or Distinction) in Physics or Chemistry or Biology which satisfy the requirements of the Teaching Council may enter this programme in third year. Full details are given in the UCC Calendar.
Student Profile
KEVIN BUCKLEY
BSc(Hons) in Science Education 2011

"I qualified as a science teacher in 2011 via the BSc(Ed) degree in UCC. I found that the degree was a great preparation for a career in science teaching. I really enjoyed the course and I found it a huge advantage to be a fully qualified science teacher in four years without the need to undertake the Postgraduate Diploma in Education. The structure of the course suited me a lot as it allowed me a year to settle into college and to take a common first year science course before registering for the BSc(Ed) in second year. This meant that I did not have to make up my mind about a career in science teaching while I was still doing my Leaving Certificate and allowed me the option of either a career as a scientist or a career in science teaching at the beginning of second year in UCC.

I liked the fact that there was Teaching Practice Placement in second year, third year and fourth year of the programme. The time spent teaching in schools gave me invaluable experience and I gained confidence in front of classes and this helped to make up my mind that science teaching was the career for me. It was great to have close links with the university during this teaching practice as I received great support from both the school and the university while I was a student teacher working in local schools.

I took the Chemistry route of the degree and, after graduating, I obtained a full-time teaching position in John the Baptist Community School, Hospitel, Co Limerick. As well as teaching Leaving Cert Chemistry, I also teach Transition Year Science and Junior Certificate Science and Maths. It was great to receive my training in the Eureka Centre UCC as the labs are just like state-of-the-art school labs with all the equipment needed to teach Leaving Certificate Physics, Chemistry and Biology. Even though I took the Chemistry route, I also studied Physics and Biology during the programme and this gives me great flexibility in my teaching if I am asked to take classes in these subjects. It was also great to have the Eureka Resource Centre available with all the books that I needed to help me prepare my lessons.

I love teaching science and I firmly believe there’s nothing better than doing a job that you love, I get great satisfaction seeing my students enjoying learning science and succeeding so well in their studies"
What will you be studying?

Year 1

**CK402 Biological and Chemical Sciences**
- Chemistry (15 credits) • Physics (15 credits)
- Biology (20 credits) • Mathematics (10 credits)

**CK404 Biological Earth and Environmental Science**
- Chemistry (10 credits) • Physics (5 credits)
- Biology (15 credits) • Mathematics (10 credits)
- Geology (10 credits) • Environmental Science (5 credits) • Geography (5 credits)

**CK406 Chemical Sciences**

**Option 1**
- Chemistry (20 credits) • Physics (15 credits)
- Biology (15 credits) • Mathematics (10 credits)

**Option 2**
- Chemistry (20 credits) • Physics (10 credits)
- Biology (10 credits) • Mathematics (10 credits)
- Geology (5 credits) • Environmental Science (5 credits)

**CK408 Physics and Astrophysics**
- Physics (20 credits) • Mathematics (15 credits)
- Chemistry (15 credits) • Biology (10 credits)

Year 2

**Route I: Chemistry**
- Chemistry (30 credits) • Education (30 credits)

**Route II: Physics**
- Physics (30 credits) • Education (30 credits)

**Route III: Biology**
- Biology (30 credits) • Education (30 credits)

Year 3

**Route I: Chemistry**
- Chemistry (30 credits) • Education (30 credits)

**Route II: Physics**
- Physics (30 credits) • Education (30 credits)

**Route III: Biology**
- Biology (30 credits) • Education (30 credits)

Year 4

Education (60 credits).