



Photo: F. Fiordella (IRI/CCAFS)

Climate Change, Agriculture and Food Security

The world's climate is rapidly changing due to global warming, and will continue to do so for the decades and centuries ahead. This poses major challenges for future agricultural systems to provide food and other bioresources for the 9 billion people that will occupy the planet by 2050. The new MSc in Climate Change, Agriculture and Food Security (CCAFS) provides students with the skills and tools for developing agricultural practices, policies and measures addressing the challenge that global warming poses for agriculture and food security worldwide.

Graduates of this programme will be equipped to pursue roles associated with local, national and

international efforts to promote sustainable agricultural production, global food security and climate change adaptation.

Programme Facts

Programme level: Level 9

Duration: 1 year

PAC code: GYS00

Minimum requirements: NQAI Level 8 honours degree or equivalent to a minimum standard of Second Class Honours, Grade 1 or equivalent in an appropriate discipline.

Fees: Fees information and funding opportunities please visit www.nuigalway.ie/student_fees. Tuition fees for international (non-EU*) students are listed on www.nuigalway.ie/student_fees/how-much/postgraduate-fees/

Closing date for applications: NUI Galway does not set a deadline for receipt of applications (with some exceptions). Offers will be issued on a continuous basis. Candidates are encouraged to apply as early as possible. Applications to most postgraduate programmes at NUI Galway are made online via the Postgraduate Applications Centre (PAC). For full details of when and how to apply prospective students can access the system through PAC on www.pac.ie/nuigalway

Contact information / Enquiries to:

Dr Edna Curley
Programme co-ordinator
T +353 91 494 158
E edna.curley@nuigalway.ie

Prof. Charles Spillane
Head of Discipline of Botany & Plant Science
T +353 91 494 148
E charles.spillane@nuigalway.ie



Photo: Neil Palmer (CIAT).

Why study this programme?

Climate change poses major challenges for agriculture and food security, both in terms of the impacts of climate change and the contributions of agrifood systems to climate change. Humanity faces a dual challenge. How can adaptation of future agricultural systems to climate change be achieved? How can we mitigate the effects of agriculture on climate change?

The new MSc in Climate Change, Agriculture and Food Security (CCAFS) is aimed at students who want to combine scientific, engineering, technical, social and policy skills so that they are better equipped to understand and make significant contributions regarding adaptation and mitigation of climate change impacts on global agriculture and food security.

The programme combines cutting-edge taught and practical components so that graduates will have the necessary skills and capabilities to pursue a career in both climate change mitigation and adaptation for agriculture and food security. Graduates will also be equipped with the balance of scientific, technical, analytical and cross-cutting skills to significantly contribute to efforts to promote sustainable agricultural production and global food security.

Programme outline

*Program subject to change

Module	Credits (ECTS)
Semester 1	
Climate Change, Agriculture & Global Food Security	5
Climate Change, Agriculture, Nutrition & Global Health	5
Policy & Scenarios for Climate Change Adaptation & Mitigation	5
Gender, Agriculture & Climate Justice	5
Low-Emissions Climate-Smart Agriculture & AgriFood Systems	5
Climate Change Adaptation, Mitigation & Risk Management	5
Monitoring Climate Change: Past, Present, Future	5
EXAM	
Semester 2 and 3	
Climate Change, Natural Resources & Livelihoods	5
AgriBiological Responses to Climate Change	5
CCAFS Science Communication: Techniques & Models	5
CCAFS Case Studies, Journal Club & Datasets	5
CCAFS Research Skills/Techniques	5
EXAM	

This is a 90 ECTS taught Masters program including the following:

- Nine modules (each of which is 5 ECTS)
- CCAFS Science Communication Project (5 ECTS)
- CCAFS Journal Club and Case Studies (5 ECTS)
- CCAFS Skills and Techniques Tutorials (5 ECTS)
- CCAFS Research Project (30 ECTS)

A range of assessment methods are used, including essays, projects, reports, presentations and written examinations.

The MSc in Climate Change, Agriculture and Food Security (CCAFS) will be located within the Discipline of Botany and Plant Science and will have close interactions with the Plant and AgriBiosciences Centre (PABC) at NUI Galway. The CCAFS MSc programme is being developed as a partnership with the international CGIAR Research Programme on Climate Change, Agriculture and Food Security, which is led by the CGIAR and Future Earth, and which currently involves over 700 partners worldwide (www.ccafs.cgiar.org). The CCAFS MSc modules will be taught by world-leading scientists and researchers in their areas of expertise. Students will encounter a wide variety of teaching methods. Modules will include web-based learning, lectures, exercises, seminars, excursions and group/project work.

Employment and career opportunities

As the climate change crisis deepens, the need for skilled graduates with skills in climate change mitigation and adaptation regarding agriculture and food security is growing. The aim of this new MSc in Climate Change, Agriculture and Food Security (CCAFS) is to provide graduates with the practical skills and tools for developing agricultural and agrifood systems, policies and measures for addressing the increasing challenge of global warming on agriculture and food security worldwide. The programme is designed to build from the skills, experience and topic background of the course entrants.

"The good news is, we have everything we need now to respond to the challenge of global warming. We have all the technologies we need, more are being developed.... But we should not wait, we cannot wait, we must not wait." - Al Gore

"For future generations, the consequences of continuing on the same carbon-emitting path are of unimaginable severity too all of society, including business, with enormous operational, financial and reputational risk." - Mary Robinson

www.nuigalway.ie/ccafs

Contact information/Enquiries to:

Dr Edna Curley, Programme Co-ordinator | T +353 91 494 158 | E edna.curley@nuigalway.ie

Prof. Charles Spillane, Head of Discipline of Botany & Plant Science | T +353 91 494 148 | E charles.spillane@nuigalway.ie