

MScCCAFS Program Annual Conference Schedule

08.30-09.00 Welcome coffee & registration

09.00-09.10 **Welcome and overview** Prof. Charlie Spillane (MScCCAFS Director) & Dr. Peter McKeown (MScCCAFS Course Coordinator).

09.10-09.30 Presentation on **Global CCAFS Program** by Dr. Andy Jarvis (CCAFS, CIAT, Cali, Colombia), External Examiner of MScCCAFS Program

Session 1

Chairs: Dr. David Styles

09.30-09.50 Orla O'Halloran (MScCCAFS), **Prioritising climate smart agriculture practices for more climate resilient coffee production in Vietnam** [Project partners: NUI Galway PABC; CGIAR Climate Change, Agriculture & Food Security Program (CCAFS); International Center for Tropical Agriculture (CIAT), Vietnam]

09.50-10.10 Rob O'Hagan (MScCCAFS), **What evidence for agroforestry contributions to food security in Indonesia?** [Project partners: NUI Galway PABC; Center for International Forestry Research (CIFOR) Indonesia]

10.10-10.30 Grant Schooley (MScCCAFS), **Measuring the water footprint of beer production across AB-Inbev's global breweries** [Project partners: NUI Galway PABC; Anheuser-Busch InBev, Belgium]

10.30-10.50 Rachael Soden (MScAgriBiosciences), **Developing oat beverages as novel plant-derived dairy alternatives** [Project partners: NUI Galway PABC; PepsiCo]

Coffee & Networking [Posters/Stands]

Chair: Dr. Una Murray

11.30-11.50 Donagh Hennessy (MScCCAFS), **For the UNFCCC's Green Climate Fund, what is transformational change in relation to adaptation of agriculture to climate change?** [Project partners: NUI Galway PABC; Food and Agriculture Organisation of the United Nations (FAO), Italy]

11.50-12.10 Franklin Msiska (MScCCAFS), **Impacts of Climate-Smart Agriculture CSA practices, off-farm income and weather information services on resilience and coping strategies of rural households in Malawi** [Project partners: NUI Galway PABC; CARE International, Malawi]

12.10-12.30 John Cleary (MScCCAFS), **Assessment of Photovoice as a participatory action research methodology for scaling Climate-Smart Agriculture in Vietnam** [Project partners: NUI Galway PABC; CCAFS and International Rice Research Institute (IRRI), Vietnam]

Lunch Break & Networking [Posters/Stands]

Chairs: Dr. Galina Brychkova

14.00-14.20 Kelebogile Kekae (MScCCAFS), **Impact of climate change on forage grass species to support Ethiopian dairy systems** [Project partners: NUI Galway PABC; CCAFS & International Livestock Research Institute (ILRI), Ethiopia]

14.20-14.40 Sair Imdad (MScCCAFS), **Co-benefits of climate change mitigation initiatives on public health in Ireland** [Project partners: NUI Galway PABC]

14.40-15.00 Rachael Murphy (MScCCAFS), **Development of smart farm sensor system for real-time geospatial measurement of greenhouse gas emissions** [Project partners: NUI Galway PABC]

15.00-15.20 Lorna Born (MScCCAFS), **Developing index-based insurance for rural communities and smallholder farmers in Zimbabwe** [Project partners: NUI Galway PABC; R4 Rural Resilience Initiative, World Food Program (WFP), Zimbabwe]

Coffee & Networking [Posters/Stands]

Chairs: Kevin Kilcline & Dr. Liz Coleman

15.50-16.10 Mark O’Looney (MScCCAFS), **3D printing for circular economy development of agri-machinery servicing for smallholder farmers in Asia** [Project partners: NUI Galway PABC; International Rice Research Institute (IRRI), Philippines]

16.10-16.30 Sarina Motsuki (MScCCAFS), **Community-based water management in South Africa** [Project partners: NUI Galway PABC]

16.30-16.50 Martin Ó Conghaile (MScCCAFS), **Frost risk, precipitation patterns and forest climatic zones: How Ireland’s changing climate will affect Sitka spruce establishment in Ireland** [Project partners: NUI Galway PABC; Teagasc Athenry]

16.50-17.10 Aoife Joyce (MScAgriBiosciences) **Automated land-use change detection using high-resolution satellite image analysis** [Project partners: NUI Galway PABC; Treemetrics]

17.10-17.30 Matteo Petitti (MScCCAFS), **Climate change and farmer participatory plant breeding** [Project partners: NUI Galway PABC; Rete Semi Rurali, Italy]

17.30 Judging Panel completed (**Prize Award**) & Presentation of 2017 Award

17.40 Wrap up from Prof. Charlie Spillane, Director of MSc.CCAFS program, and invitation to all attendees to join **Irish Forum for International Agricultural Development (IFIAD)**

17.45-19.00 Meeting of the **Working Group on Climate Smart Agriculture of the Irish Forum for International Agricultural Development (IFIAD)**.

19.00 onwards **Evening - Drinks / social evening** in Galway city centre (venue to be announced) – All welcome!

Format

Each student in the 2016-2017 class of the MSc in Climate Change, Agriculture and Food Security (MScCAFS) will present their research project topic and results in a mini-conference format to an invited audience.

Two MScAgriBiosciences students (2016-2017) whose projects are of relevance to Climate Change, Agriculture and Food Security have also been invited to present their projects also.

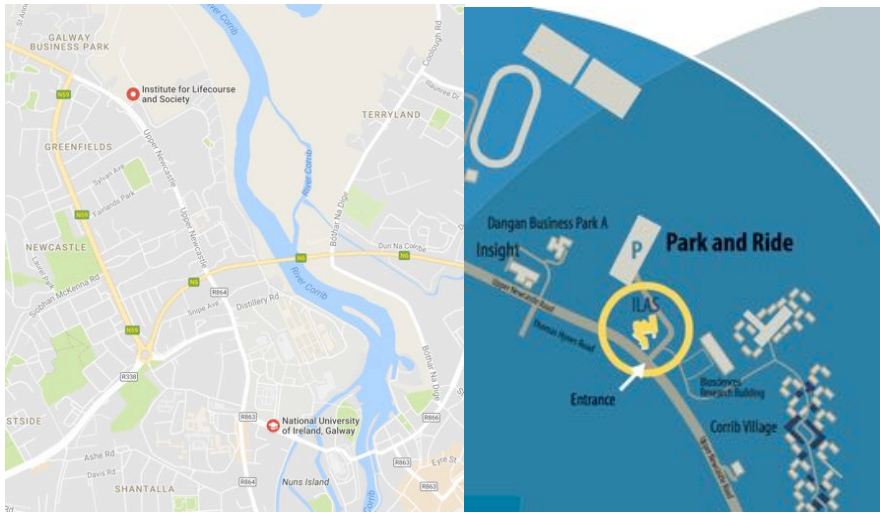
The MScCAFS blogs on their 2017 MScCAFS research projects can be found on the following weblink: <http://www.plantagbiosciences.org/msccafs-students>

A prize will be given for best MScCAFS research project presentation.

Each student will have a 20 min presentation slot (15 mins of research topic and results, 5 mins questions) with time for networking with the invited audience and incoming students (2017-2018).

Twitter hashtag: #MScCAFS2017

Directions to & Parking for the ILAS Building, NUI Galway



Parking

There is a Park and Ride carpark directly adjacent to the ILAS building.

From the South

From Cork or Limerick, approach Galway on the N18. You'll by-pass Ennis & Gort and pass through Ardrahan and Clarinbridge.

Arrive at the Oranmore roundabout just outside Galway. Take the second exit at this roundabout.

From Oranmore to NUI Galway

Follow R446 to Bothar na dTreabh/N6 in Galway City

At the roundabout, continue straight onto R446

At Martin Roundabout, take the 2nd exit onto Bothar na dTreabh/R446

Follow N6 to Upper Newcastle

At Coolagh Roundabout, take the 1st exit onto Bothar na dTreabh/N6

At Kirwan Roundabout, take the 2nd exit onto Headford Rd/N6

Turn right onto N6/R338

At Browne Roundabout, take the 5th exit to double back and stay on N6/R338

Turn left onto Upper Newcastle Road

Follow the Road for 750m and turn right for Corrib Village. The ILAS Building is directly on your left.

Masters degree (Climate Change, Agriculture and Food Security) MScCAFS Program, Plant & AgriBiosciences Research Centre (PABC), National Uni of Ireland Galway

Parking is 100m past the building at the Corrib Village Park and Ride



From the North/East

From Dublin and Belfast, continue onto M4 (signs for Sligo). At junction 1, exit onto M6 toward Galway and follow signs for Galway.

Arrive at roundabout off M6. Take the first exit at this roundabout and the third exit at the next roundabout just up ahead which will bring you on to the Dublin Road. Continue onto N6

Follow N6 to Upper Newcastle

At Coolagh Roundabout, take the 1st exit onto Bothar na dTreabh/N6

At Kirwan Roundabout, take the 2nd exit onto Headford Rd/N6

Turn right onto N6/R338

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Travelling by Public Transport

Galway is easily accessible by public transport.

Trains: Galway's train station is just off Eyre Square. The city is very well serviced by rail and only 2.5 hours away from Dublin.

Buses: You can travel to Galway using frequent services offered by our public bus service, or use one of the private bus services such as CityLink or GoBus. Direct (non-stop) buses from Dublin take 2.5 hours.

From the city centre, you can take a taxi to the university, or take the No.4 Bus in the direction of Newcastle from Eyre Square, near the train station, which is the normal drop-off point for buses.

When taking a Taxi, please ask to go past Corrib Village; the ILAS building is new. Check out the Campus Map to find your way around the University.



To arrive at the ILAS building from the main NUI Galway campus, walk from Áras de Brún/Quadrangle onto Upper Newcastle Road and turn right. Proceed for 15 minutes, crossing the N6 at the petrol station, until reaching the university entrance for the ILAS building and Biomedical Sciences Building. Alternatively, take the NUI Galway campus bus which travels from the Orbsen building to ILAS via Corrib Village.

The ILAS lecture theatre is on the first floor of the ILAS building.



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 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:

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Photo: Neil Turner (CCAFS)

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 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

**Programme 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
Sustainable Bio-Based & Circular Economy	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 Perspectives	5
CCAFS Research Skills/Techniques	5
EXAM	

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

- Twelve taught modules (each of which is 5 ECTS)
- CCAFS Science Communication Project
- CCAFS Journal Club
- CCAFS Skills and Techniques Tutorials
- 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) is associated with the Plant and AgriBiosciences Research Centre (PABC) at NUI Galway.

The CCAFS MSc programme is run 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 is 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 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 to all of society, including business, with enormous operational, financial and reputational risk." - Mary Robinson

www.nuigalway.ie/ccafs

Contact information/Enquiries to:

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NUI Galway
OÉ Gaillimh

Plant and AgriBiosciences
Research Centre

Structured MSc (AgriBiosciences)

The 1 year Structured MSc (AgriBiosciences) is a research-focused program for students who want to develop careers in the vibrant agriculture, agri-food and bio-economy sectors in Ireland or internationally.

Structured MSc (AgriBiosciences) students complete their (7-10 month) Research Project within research teams in the Plant & AgriBiosciences Centre (PABC) or in a partner organisation (e.g. Teagasc).

The Research Project is complemented by specialised training modules to equip each MSc graduate for a career in the rapidly-growing agriculture and agri-food sector.

Contact information / Enquiries to:

Prof. Charles Spillane & Mr. Kevin Kilcline
Structured MSc (AgriBiosciences) Program,
Plant & AgriBiosciences Research Centre (PABC),
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Ireland.

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Course Facts

Course level: Level 9

Duration: 1 year

Entry Requirements: Candidates should hold (or expect to soon complete) an Honours degree; candidates who do not meet this requirement but who have 3 years relevant work-experience within the agribiosciences arena, will be considered for admission in accordance with University policies on Recognition of Experiential Prior Learning.

Fees: €6,815 (EU), €13,750 (non-EU) ; see <http://www.nuigalway.ie/courses/research-postgraduate-programmes/structured-phd/agribiosciences.html>

Applying: www.pac.ie/nuigalway

Closing date: 31st August

www.plantagbiosciences.org



Why should you study the MSc (AgriBiosciences) Program?

The MSc (AgriBioscience) is specifically tailored to transition you to a career in the vibrant and exciting agri-food sector in Ireland or internationally. The EU agri-food industry has a €600 billion annual turnover, and is the continent's third largest employer (2.6 million jobs, excluding farmers). The MSc (AgriBiosciences) has been developed in partnership with Ireland's national agri-research body, Teagasc and provides the opportunity to do your research project with Teagasc or other national/international agriculture or agri-food employers. The program also provides hands-on training in AgriBusiness and AgriFood Markets, and in developing Career Strategy skills.

MSc (AgriBiosciences) Program Outline

In Semester I of the MSc (AgriBiosciences), you will study four tailor-made taught modules that provide training in key areas for planning an agribiosciences career. These modules are taught by experts in the field from the NUI Galway PABC, Teagasc and other national/international partner organisations, and are examined through production of student reports, investor pitches, presentations and learning journals.

Module 1:

Understanding Ireland's Agriculture and Agri-Food Sectors (5 ECTS)

Module 2:

AgriFood Sustainability & Agri-Resilience Challenges (5 ECTS)

Module 3:

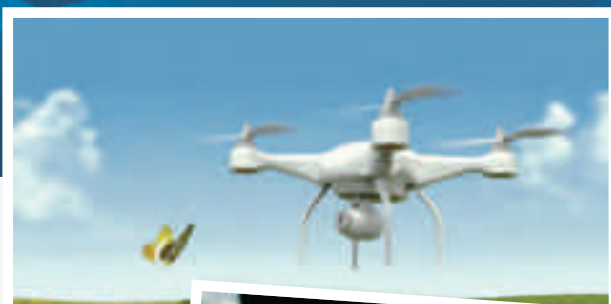
Understanding AgriBusiness & AgriFood Market Trends (5 ECTS)

Module 4:

AgriFood Career, Communication & Impact Pathway Skills (5 ECTS)

These are supplemented with training in transferrable graduate skills. In Semester II, you will begin your MSc Research Project in agribiosciences innovation under the supervision of experts from the NUI Galway Plant & AgriBiosciences Research Centre, Teagasc, and/or other national/international institutions or companies (see www.plantagbiosciences.org for details).

Your Research Project is written up as a Thesis and presented to your supervisors and classmates at the end of the year.



MSc (AgriBiosciences) Employment & Career opportunities

The "Green Economy" demand for renewable agriculture-derived products (food, animal feed, nutritional and nutraceutical products, bioenergy, industrial chemicals, fibres and biocomposites) will grow rapidly over coming decades. This demand will require a synthesis of innovative new skills and outlooks in agribiosciences, precision agriculture, and climate-smart farm "next-generation" innovations. The MSc (AgriBiosciences) will provide you with the specialised skillsets needed to build a career in this sector and has been designed to build links between our MSc graduates and major agricultural and agrifood employers and agencies.

On completion of the MSc (AgriBiosciences), you will have a proven track record in agri-biosciences research and innovation topics, transferable post-graduate skills and a strong career planning skills. You will also have had the opportunity to meet and work with leading researchers and industry figures. This MSc will equip you to successfully compete for opportunities in industry, government agencies, further education (e.g. PhD research), or entrepreneurial activities.



www.plantagbiosciences.org

Contact information/Enquiries to:

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