



BioBeo

Innovative Education for the BioEconomy





















Background Information:

The BioBeo Blended Intensive Programme (BIP), an output of the Horizon Europe funded BioBeo Education Programme led by Maynooth University (MU), pioneers new approaches to circular bioeconomy education across Europe. BioBeo strategically introduces circular bioeconomy curricula in primary, secondary schools and in university settings, aiming to foster youth and citizen engagement in bioeconomy policy-making. Maynooth University, University College Dublin, Rotterdam University of Applied Sciences and Odisee University of Applied Sciences collaborate on the project, inviting students to join the BIP, enhancing their understanding of bioeconomy and encouraging knowledge dissemination. This eight-day ERASMUS and Horizon Europe funded programme includes in-person and online components, culminating in the European BioBeo Festival on the 15th March 2024. Aimed at future educators, the BIP equips participants to teach bioeconomy concepts in diverse educational settings. Dr Máire Nic an Bhaird and Dr Laoise Ní Chléirigh are excited to welcome the BIP scholars to Maynooth University in March 2024.

Please ensure that all BIP participants bring suitable outdoor clothes and footwear for rainy days as outdoor learning is a key methodology to the BIP.

Name	Initialism
Maynooth University	MU
University College Dublin	UCD
Rotterdam University of Applied Sciences	RUAS
Odisee University of Applied Science	OUAS
University of Hohenheim	UH
International Parents Association	IPA
Trinity College Dublin	TCD



How to get from Dublin Airport to Maynooth University:

A good option is to get an AIRCOACH - this is a large blue coach outside the airport terminals (Zone 2 if coming in at Terminal 1 and Zone 20 if coming in at Terminal 2). This is a direct bus and requires no changes. Please book ahead for discounted prices on <u>Aircoach | Dublin Airport Bus | Bus To Dublin Airport | Aircoach | Aircoach | Aircoach | Dublin Airport | Dublin Airport | Dublin Airport | Aircoach | Dublin Airport | </u>

The airport hopper is also an option for transport from Dublin airport to Maynooth: <u>Airport Hopper - Dublin Airport Shuttle Service</u>

Alternatively, the bus line 782 can be taken from Dublin Airport T1 to Heuston Train Station in Dublin City (Route 782 - Dublin City to Dublin Airport). Here you will change from this bus to the C4 bus line to Maynooth Station (Dublin Bus - Route C4) From the station you will take a short walk to the campus, through the village of Maynooth.

BioBeo Blended Intensive Programme Schedule

Date & Day	Time & Location	Event	Speaker/Host
		Day 1	
Friday 1/3/24	Venue: Reception (No2 on map of South Campus)	On Campus Check-in at accommodation on South Campus. Check-in is available from 2pm. See Appendix 1 for details.	N/A
Friday 1/3/24	19:30	Free Time for Relaxation, Nourishment, and Nature Exploration.	N/A
		Day 2	
<u>Pleas</u>	<u>e wear suitable outdoor clo</u>	<u>thing and rain gear for outdoor</u>	sessions
G . 1	11.00		С Т
Saturday 2/3/24	11:00 South Campus Gates	Guided Tour of Maynooth University Campus See Appendix 2.	Campus Tours
Saturday 2/3/24	12:00 – 13:00 Venue: Seomra na Cuallachta, Loftus Hall	BioBeo Bioeconomy Consultation Open Hour (Via Zoom) See Appendix 3	Dr Evelyn Reinmuth (UH)



		https://uni-hohenheim.zoom-x. de/j/4681390159?pwd=SStiN WltbTJGSUJFT2ZHVHArYz FsQT09	
Saturday 2/3/24	15.00 - 18.00 South Campus Gates	BioBeo Nature Harmony Retreat: Forest Bathing Session for Mindful Wellness	Katriina Kilpi (BOS+)
Saturday 2/3/24	21.00 Avenue Restaurant, Maynooth Main Street Maynooth W23 DX49 Co. Kildare	Dinner reserved for BIP BioBeo students in Avenue Café, Maynooth. AVENUE – Cafe Restaurant Bar (avenuecafe.ie)	N/A
Ple	ease wear suitable outdoor clo	Day 3 thing and rain gear for outdoor	sessions
Sunday 3/3/24 Sunday 3/3/24	10:00 – 12:00 Venue: Maynooth University Library (Group study rooms 7 to 11) 12.00 – 13.00 Venue: Seomra na Cuallachta, Loftus Hall	Visionary Reflection Session: BIP Students Review The European Youth Ambassadors' Bioeconomy Vision Document, Explore Key Questions and Engage in Nature Journalling. See Appendix 4 BioBeo Bioeconomy Consultation Open Hour (Via Zoom) See Appendix 3 https://uni-hohenheim.zoom-x.	N/A Dr Evelyn Reinmuth (UH)
0.1	12.00 14.00	de/j/4681390159?pwd=SStiN WltbTJGSUJFT2ZHVHArYz FsQT09	
Sunday 3/3/24	13.00 -14.00	Free Time for Relaxation, Nature Exploration and Bioeconomy Chat! (own lunch).	N/A
Sunday 3/3/24	14.00 - 17.00	Exploring Biodiversity at Maynooth University Campus. Connecting with your new environment for the week - Citizen Science Task.	Dr James Carolan/Dr Máire Nic an Bhaird/Dr



		See Appendix 5	Laoise Ní Chléirigh
		Day 4	
Monday 4/3/24	9.30 – 12:00 Venue: TSI028	Empowering BioBeo BIP Students: International Parents Association (IPA) Workshop on Engaging Children, Parents/Guardians and Communities in the Bioeconomy Learning Journey.	Dr Judith Horgas (IPA)
Monday 4/3/24	12:00-13:00 Venue: TSI028	Free Time for Relaxation, Nature Exploration and Bioeconomy chat! (own lunch).	N/A
Monday 4/3/24	13:00 – 17:00 Venue: TSI028	Empowering BioBeo BIP Students: International Parents Association (IPA) Workshop on Engaging Children, Parents/Guardians and Communities in the Bioeconomy Learning Journey.	Dr Judith Horgas (IPA)
		Day 5	
Tuesday	9.30 - 12.00	Capturing Insights in Colour:	
5/3/24	Venue: TS1030	Visual Reflections from the BioBeo Primary Education Programme.	
Tuesday 5/3/24	9.30-11.00 Venue: TSI030	BioBeo Primary Education Programme: Interactive Workshop on Bioeconomy Education in the Primary School Setting.	James Lowry (MU)
Tuesday 5/3/24	11.00- 12.00 Venue: JHL6	BioBeo Primary Education Programme: Interactive Workshop on Bioeconomy Education in the Primary School Setting. Part 2.	James Lowry (MU)
Tuesday 5/3/24	12.00 – 13.00 Venue: SE131	BioBeo Bioeconomy Consultation Open Hour (via Zoom) See Appendix 3	Dr Evelyn Reinmuth (UH)



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		https://uni-hohenheim.zoom-x. de/j/4681390159?pwd=SStiN WltbTJGSUJFT2ZHVHArYz FsQT09		
Tuesday 5/3/24	13.00 – 14.00 Venue: Pugin Hall	Lunch for all in Pugin.	N/A	
Tuesday 5/3/24	14.00-16.00 Venue: Callan Hall	BioBeo Interactive Workshop: Integrating Bioeconomy Content in the Secondary School Setting.	Janneke Verloop (RUAS)	
Tuesday 5/3/24	16.00 - 17.00 Venue: Callan Building 9	BioBeo Board Game Bonanza: A Playful Journey into Bioeconomy Education.	Sakshi Anand (UCD)	
Please v	Day 6 Please wear suitable outdoor clothing and rain gear for your outdoor sessions			
Wednesday 6/3/24	09:30 – 11:00 Venue: SE131	BioBeo Bioeconomy Festival Workshop: Reflective Session on Vision Document Feedback.	Bram van den Broeck (OUAS)	
Wednesday 6/3/24	11.00 – 11.30 Venue: SE131	Coffee/ Tea and Pastries and Bioeconomy Chat!	N/A	
Wednesday 6/3/24	11.30 – 13:00 Venue: SE131	BioBeo Bioeconomy Festival Workshop: Simulated Panel Discussion to Prepare for Vision Document Panel Discussion See Appendix 6	Bram van den Broeck (OUAS)	
Wednesday 6/3/24	13.00 – 14.00	Free Time for Relaxation, Nature Exploration and Bioeconomy Chat! (own lunch).	N/A	
Wednesday 6/3/24	14.00 – 18:00 South Campus Gates	Outdoor Reflection Session: BIP Students Create a Video for EU Bioeconomy Changemakers Festival. Recording Insights on European Youth Ambassadors' Bioeconomy Vision Document and on Integrating	Dr Tom Curran/ Sakshi Anand (UCD)	



		Bioeconomy into Primary and Secondary Schools.	
Wednesday 6/3/24	19.00	Dinner for BIP staff/visiting lecturers at Avenue Restaurant, Maynooth. AVENUE – Cafe Restaurant Bar (avenuecafe.ie)	Dr Máire Nic an Bhaird/Dr Laoise Ní Chléirigh (MU)
<u>Please</u>	wear suitable outdoor clothi	Day 7 ng and rain gear for your outdo	oor sessions
Thursday 7/3/24	9.30 - 10.00 Venue: SE133	Tea/coffee and pastries and bioeconomy chat!	Dr Máire Nic an Bhaird/Dr Laoise Ní Chléirigh (MU)
Thursday 7/3/24	10.00 -11.00 Venue: SE133 Lecture 10:00-10:40 Q&A 10:40-10:55	Professor Jane Stout (VP for Biodiversity and Climate Action, at TCD) delivering a lecture on 'BIOrbic - An Interdisciplinary Approach'	Dr Máire Nic an Bhaird/Dr Laoise Ní Chléirigh (MU)
Thursday 7/3/24	11.00 - 11.30	Free Time for Relaxation, Nature Exploration and Bioeconomy chat!	N/A
Thursday 7/3/24	11.30 Bus leaving MU North Campus, New coach Park after Students' Union.	Exploring Bioeconomy: Trip to University College Dublin	Dr Máire Nic an Bhaird/ Dr Laoise Ní Chléirigh (MU)
Thursday 7/3/24	13.00 – 14.00 School of Archaeology, UCD.	Back to the Future: Lecture by Professor Aidan O'Sullivan and Dr Brendan Ó Néill on Interconnectedness in Soil, Seas, Rivers, Crafts, and Food Preparation, Explored through the Bioeconomy Lens in their Medieval Roundhouse.	Prof Aidan O'Sullivan/Dr Brendan Ó Néill (UCD)
Thursday 7/3/24	14.00 - 15.00 Medieval Roundhouse UCD	Launch of MU/UCD BioBeo bioeconomy comic 'Back to the Future with Beo and Raja:	Dr Tom Curran (UCD)



		A Tale from the Early Bioeconomy' by Minister of State for EU Affairs and Defence Peter Burke.	
Thursday 7/3/24	16:00 – 17:30 Trinity College Dublin	The Book of Kells Experience - Trinity College Dublin.	Dr Máire Nic an Bhaird/Dr Laoise Ní Chléirigh (MU)
		Day 8	
Friday 8/3/24	9.30-10.30 Venue: SE129	Exploring Biodiversity at Maynooth University Campus	Dr James Carolan (MU)
Friday 8/3/24	10.30 – 11.30 Venue: SE129	Collaborative Session: Creating BioBeo Video No 5 which will focus on the World of Bioeconomy and the 5 BioBeo Bioeconomy Themes.	Dr Máire Nic an Bhaird/Dr Laoise Ní Chléirigh (MU)
Friday 8/3/24	11.30 - 12.00 Venue: SE129	Celebrating Achievement: BioBeo Blended Intensive Programme Certificate Ceremony.	Alena Jurikova (International Office)
Friday 8/3/24	12.00 – 15.00 Venue: SE301	BISC-E Irish University Students Final for the 23/24 Biobased Innovation Student Challenge.	Dr Máire Nic an Bhaird/Dr Laoise Ní Chléirigh (MU)
Friday 8/3/24	12.00 - 13.00 Venue: SE301	Lunch - Sandwiches and tea/coffee.	Dr Máire Nic an Bhaird/Dr Laoise Ní Chléirigh (MU)
Friday 8/3/24	13.00 - 13.45 Venue: SE301	BISC-E 24 Challenge: Student Presentations.	Student Competitors
Friday 8/3/24	13.45 - 14.10 Venue: SE301	Judges' Deliberation: Assessing Irish Teams' Presentations for BISC-E 24 Challenge.	Judging Panel
Friday 8/3/24	14.10 - 14.45 Venue: SE301	Highlighting Excellence: Judges Offer Feedback and Unveil Irish University Winners for BISC-E 24 European Final.	Judging Panel



Appendix 1 - Checking Information, South Campus

Please see below, a map of the South Campus which indicates the location of the reception office (No.2), and shows St. Patrick's House, where the bedrooms are located (No.5).

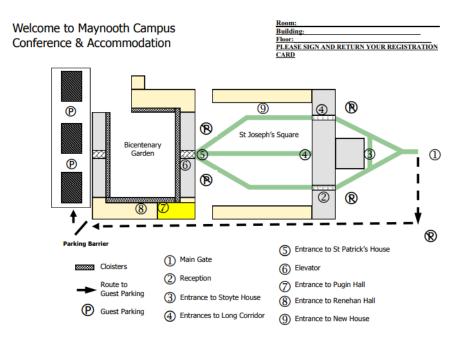
Check-in is available from 2pm on the day of arrival at the reception desk, and it is open until 11pm. If any guests arrive after 11pm, arrangements must be made in advance to collect room keys in an alternative way.

Contact details:

Opening Hours 9am to 5pm Monday to Friday. **Email:** <u>residence.office@mu.ie</u>, All communications with this office are conducted via email.

In case of emergency - Reception is open during Mon to Fri 9am to 5pm and for all other hours 7 days call Security - **Telephone** Security: + 353 1 7083929

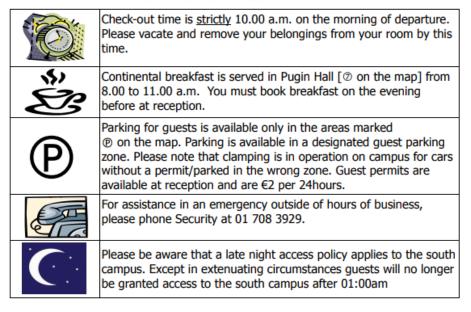
Bed linen and towels are provided for all guests. See further details regarding accommodation below.



Map of South Campus Accommodation Location



Welcome to Maynooth Campus Conference & Accommodation



Maynooth Campus Accommodation Information

Appendix 2 - Maynooth Campus Venue Map

Please see this map for details

https://www.maynoothuniversity.ie/sites/default/files/assets/document/Campus%20Map%2C%20Index%20%26%20Venues%20 2.pdf

Appendix 3 - Compulsory learning before BIP

- 1. Read the definition paper from BioBeo about the Bioeconomy. It is not too long and you will understand the political approach and how Bioeconomy is being built.
- 2. Go through the Schoolbox of Bloom:

https://eur02.safelinks.protection.outlook.com/?url=https%3A%2F%2Fbloom-bioeconomy.eu%2Fschoolnetwork%2Fschoolbox%2F&data=05%7C02%7CMaire.NicanBhaird%40mu.ie%7Cd



b9066818fcc4876be0f08dc141b72e3%7C1454f5ccbb354685bbd98621fd8055c9%7C0%7C 0%7C638407355326818982%7CUnknown%7CTWFpbGZsb3d8eyJWIjoiMC4wLjAwMDAiLCJQIjoiV2luMzliLCJBTil6lk1haWwiLCJXVCl6Mn0%3D%7C3000%7C%7C%7C&sdata=KTvAtcWiPOJFmhv9jG7tVKbFoKvSrpXxjHeFxL0Aers%3D&reserved=0

After that theory and practice have been combined and usually then teachers have identified areas in which they feel they need more expertise.

- 3. Go through our MOOC and select information that you would like to learn more about. Our MOOC is structured according to topics and students can select what they need. After that there will still be remaining questions about how to best to frame the bioeconomy theory in the context of the teachers' specific field of expertise. https://iversity.org/en/courses/concepts-of-sustainable-bioeconomy
- 4. Send your questions that came up during this preparation to our Bioeconomy consultant in the University of Hohenheim Evelyn Reinmuth <u>Evelyn_Reinmuth@uni-hohenheim.de</u>
 She will answer your questions during the 3 BIP consultation sessions. Each student is to email their questions before 26th February 2024.

Appendix 4 - Bioeconomy Youth Vision Document Questions for Reflection:

In groups of 6 in group study rooms 7-11 in Maynooth University Library, please discuss and answer the following questions. Write your answers for later discussion throughout the week.

- 1. Define bioeconomy and why do you think it is important to embed this concept in education?
- 2. Identify the 5 key messages of the Bioeconomy Youth Vision Document.
- 3. Who do you think is the target audience for this document? Who are the stakeholders they mention?
- 4. As student teachers, and reflecting on the Bioeconomy Youth Vision Document you have now read, outline the main objectives of the document for the development of the bioeconomy.
- 5. The Vision Document states 'Bioeconomy should be an all-encompassing concept, addressing the interests of all stakeholders' Discuss this in relation to schools and education at all levels.
- 6. 'Traditional, data-driven communication fails to resonate with the younger generation, who seek a more personal and emotional narrative' Discuss this theory.



7. Create your group responses through the use of 'The Arts'. For example, create a poem/song/mime/dance or something as creative as you wish! This will be recorded during the week on video for the EU Commission where it will be shown. Make your voice heard!

Appendix 5 - Exploring and Recording Biodiversity at Maynooth University.

- 1. Go to the website MU North Campus Biodiversity Map (cloud.microsoft) Here you will see how staff and students of Maynooth University are working in the area of citizen science, recording biodiversity through the submission of data, from the click of a button.
- 2. With this information and your smartphone, please take a walk on the lush campus and observe the biodiversity around you.
- 3. Photograph 5 trees and 5 flowering wild plants. Also, if you see any insects on the flowers try to photograph and identify them (no more than 5). However, it may be too early in the year to find any.
- 4. For each specimen you will need to record the following: Recorder Name, Species Name, Common name, Location name, Grid reference (GPS record) and Date. These can be entered into the **Biodiversity Recording Sheet excel** that has been provided along with your images. Examples of records have been included for your reference.
- 5. Upload and store your Recording Sheets in the **BioBeo BIP Teams** to share with the wider group on Friday. Dr Jim Carolan (Dept of Biology Lecturer and Chair of the Maynooth Green Campus) will join us on Friday to help with any missed identifications and help upload the data to the National Biodiversity Database (https://biodiversityireland.ie/).
- 6. All data from your excel sheets will be uploaded using the BackYard Biodiversity submission portal. This site can also be used to help get grid references for your sites.
- 7. Happy biodiversity hunting!

Useful apps and links for identifications

Flowers https://www.wildflowersofireland.net/

Apps: PlantNet or FloraIncognita (available on App Store or Google Play)



Trees

https://www.woodlandtrust.org.uk/trees-woods-and-wildlife/british-trees/how-to-identify-trees/

App: Tree ID-British trees (available on App Store or Google Play)

Appendix 6 - BioBeo Bioeconomy Festival Workshop: Simulated Panel Discussion to Prepare for Vision Document Panel

The Bioeconomy Blended Intensive Programme (BIP) will incorporate a distinctive pedagogical strategy in the form of a Vision Document Panel Discussion. In this innovative session, BIP students will actively participate in a simulated panel event, employing drama methodologies to enhance their proficiency and readiness for the subsequent authentic panel discussion at the imminent BioBeo Festival. This preparatory exercise is strategically designed to provide students with a simulated yet realistic experience, enabling them to navigate the intricacies of panel discourse within the context of the bioeconomy. By engaging in this simulated panel discussion, participants will cultivate a heightened level of preparedness, ensuring a nuanced and informed contribution to the forthcoming substantive discourse at the BioBeo Festival.