

# SUSTAINABLE BIOECONOMY AND BUSINESS SPRING SEMESTER



**eRDI**  
Empowering Regional  
Development and Innovations



Co-funded by the  
Erasmus+ Programme  
of the European Union

# Info

## **DEGREE/LEVEL**

Bachelor

## **COURSE LOCATION**

Joensuu, Finland

## **COURSE LANGUAGE**

English

## **LANGUAGE LEVEL REQUIRED**

B1

## **TARGET GROUP**

All fields but especially forestry, environmental engineering, business, tourism

## **REQUIREMENTS**

You should have completed your first year of studies at your home university

## **DATES**

January – May

## **APPLICATION PERIOD**

September – October

## **CONTENTS**

The Sustainable bioeconomy and business semester is a broad overview to bioeconomy. Bioeconomy is seen as the new economy, where the majority of the societies' income is generated from bio-based sectors: food and feed, forestry, energy, waste, environment, biotechnology, water and agriculture. The biobased economy integrates natural and renewable resources with their processing and consumption.

Bioeconomy is closely linked to regional development and contains themes such as environmental management, social responsibility, sustainable business, innovation, solutions to regional and local challenges, renewable energy and green care. These will be introduced and investigated further during the semester in a multinational, multidisciplinary student, lecturer and working life partner group. Students and lecturers come from different countries, for example EU countries and Canada.

## **COST**

If your home organisation has a student exchange agreement with Karelia University of Applied Sciences, there are no tuition fees. In case your home organisation does not have an agreement, please contact our International office at [mobility@karelia.fi](mailto:mobility@karelia.fi).

## Karelia International Office



[mobility@karelia.fi](mailto:mobility@karelia.fi)



[www.karelia.fi/en/education/exchange-students](http://www.karelia.fi/en/education/exchange-students)

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# ABOUT KARELIA UAS

Karelia University of Applied Sciences is situated in a region that provides attractive facilities for living, working and entrepreneurship. The region of North Karelia is renowned for a traditional and active cultural life, as well as unspoiled nature. Approximately 4 000 students take Bachelor and Master level courses at Karelia UAS yearly in its seven fields of education.

Education in universities of applied sciences offers a practical approach to higher education and emphasises close contacts with the business, industry and service sectors. The degrees are designed to have a strong professional emphasis.



# ABOUT JOENSUU

Joensuu is a student capital of eastern Finland and all you need is only walk away. Joensuu is also the lively capital of the North Karelia region. Here we have the relaxed and social Karelian lifestyle, the joy of life being its distinctive nature. Approximately 25 % of Joensuu inhabitants are students. Karelia UAS has its own Student Union POKA and in town you find also Erasmus Student Network Joensuu, which offers lots of activities.

The student housing company Joensuun Elli provides students with flats ranging from adorable shared flats to single-room studios. You can easily reach both the city centre and your campus by bike.





## STUDENT TESTIMONIALS

**"I SAW DIFFERENT KINDS OF LECTURES AND ANGLES TO ENVIRONMENTAL CASES."**

**"I WOULD RECOMMEND THE COURSE, I HAD A GREAT EXPERIENCE AT  
KARELIA AND JOENSUU."**

**"I LOVED IT."**

**"DO IT! IT WILL BE AN EXPERIENCE YOU  
WILL NEVER FORGET."**

**"I REALLY ENJOYED THIS PROGRAMME. I HOPE THAT I WILL USE THIS KNOWLEDGE IN MY  
FUTURE CAREER."**

# COURSE OVERVIEWS

The courses are arranged in two 15 ECTS modules and one 5-15 ECTS module. You can choose the courses to be completed during your exchange at Karelia UAS and top up with other courses available in English language. An average number of credits to complete per semester is 25 ECTS.

# 15 ECTS

## INNOVATIVE ECOSYSTEMS

The Innovation ecosystems module provides you with an opportunity to build your understanding about innovation ecosystem and applied development practises. The process will be supported with an applied development project provided by the working-life partners.

## STRATEGIC REGIONAL PLANNING [BIP7018]

The economic modernisation requires Europe to give power to the regions and assist them in creating employment for the people. To enable the regions' economic growth, emphasis is put on innovation, digitalisation, decarbonisation and developing people's skills. This is part of the EU's regional policy programmes and referred to as smart specialisation.

You will get acquainted with the policy framework for bioeconomy and regional development in EU and learn how it has affected different countries in EU. The multinational lecturer team will present cases from EU and beyond and you will also contribute to sharing cases from your own country. You will learn what bioeconomy is. Multicultural communication skills are integrated as part of the course.



## **SOCIAL AND ENVIRONMENTAL INFRASTRUCTURE** [BIP7019]

What are the most important current environmental and social issues in the regions? How do they affect our everyday life and the quality of life? How can we use bioeconomy to solve environmental and social issues within a region? Understanding the different issues and the levels (EU, national, regional) will help you address the issues and find solutions to overcome them.

You will collect data on the local level on environmental and social issues, analyse it and report it. You will also consider different solutions to the issues. During the process, you will become aware of the links between environmental and social challenges and quality of life and regional development.

## **SUSTAINABLE AND INNOVATIVE BUSINESS** [BIP7020]

Entrepreneurship is seen as an important factor in regional economic growth. Businesses are finding new ways of organising themselves and are more interested on social issues and environmental sustainability in their activities. Innovative and responsible businesses are a key element in regional development especially in sparsely populated areas.

During the course, you will consider your own possibilities of becoming an entrepreneur and learn business plan development using a sustainable and innovative business model. You will visit companies and organisations in North Karelia and see how local bioeconomy sector companies operate.





# 15 ECTS

## **ENVIRONMENTAL MANAGEMENT**

In this module you will have the opportunity to build your environmental management expertise. Environmental management is applied in companies throughout the world and can include, for example, plans for waste management and energy conservation. Concepts of environmentally responsible business, climate and energy plans will be introduced. The module comprises three five ECTS courses which will be conducted in close collaboration with working life partners.

## **SOCIAL AND ENVIRONMENTAL RESPONSIBILITY** [BIP7021]

Social and environmental responsibility is a rather common practice in businesses. The ideology is applied in businesses regardless of their line of business. You will get to know the basic principles and guidelines of social and environmental responsibility and can identify the activities and practices. The multinational lecturer team will present case examples of corporate social responsibility from small and medium-sized companies.





## **CLIMATE AND ENERGY PLANNING** [BIP7022]

Climate and energy issues are closely linked with bioeconomy and economic growth. Climate and energy planning is made on all levels (local, regional, national, EU, worldwide). Carbon emission reduction measures are many and understanding them will enable you to take them into account in your future career.

You will learn about climate conservation and energy solution planning processes and policies and be able to calculate the carbon footprint. Sustainable Energy Action Plans as set by the EU will be introduced.

## **ENVIRONMENTAL MANAGEMENT PROJECT** [BIP7023]

Organisations apply environmental management in their daily practises in variable means and their reporting practices vary. Even though many organisations have an environmental management system in place, they may also benefit from collaboration with students. In addition, many organisations do not have the resources for setting up environmental management systems or for considering environmental issues in their practices.

In this course, you will collaborate with an organisation to apply the knowledge gained in the previous courses. You will communicate with the organisation on their needs, search for solutions and suggest improvements. Projects can include, for example, life-cycle analysis, waste prevention and recycling, environmental audit and sustainable community development. You will agree together with the organisation on the schedule and reporting the results.



# 5 - 15 ECTS

## CONNECT THE DOTS TRAINING

Connect the dots training can be 5, 10 or 15 ECTS, depending on your learning agreement. The training takes place in our working life partner or Karelia UAS' own projects. It provides you with an opportunity to gain practise, apply tools, create networks and deepen your understanding in working in a bioeconomy related context.

The number of students is limited based on the availability of the placements.





# STUDYING AT KARELIA

## **DIFFERENT WAYS OF LEARNING**

Karelia UAS applies different ways of learning to support the learning process. We like to engage the students' engagement in the learning process rather than have you learn from lectures without your own critical thinking and learning by heart. To do this, we use a variety of teaching methods and pedagogical approaches. During the Sustainable bioeconomy and business semester, you will get familiar with (to name a few):

**blended learning;** a combination of e-learning via different e-learning platforms and classroom activities . This requires you to be active, have good time management and responsibility. The online activities can include, for example, group discussions, collaborative report writing and feedback.

**project based learning;** a project given by a working life partner will be assigned to you or your group. You will work together with the working life partner, decide on the way to work, schedule and the output together.

**flipped learning;** you will be given material on the topic before the classes begin and the time used in the classroom is used for discussion, in-depth analysis of the material and solving the problems. You will learn how to control time and practise self-discipline in addition to improving your discussion skills.





## LEARNING PLATFORMS

The Moodlerooms learning environment is used at Karelia UAS as means of e-learning. Moodlerooms can be used to deliver study materials, submit assignments to the teacher, take exams and discuss learning with your peers. Moodle also serves as a support for student counselling and recorded lectures can also be stored in Moodlerooms. It is important to log into Moodlerooms regularly as it is the main source of information for the students.

## CREDITS

All Finnish higher education institutes apply the European Credit Transfer System, ECTS. One ECTS is equivalent to app. 27 hours of student work. Student work includes contact lectures, lab work, tutorials, guided distance study, discussions, group work and self-study. One semester comprises 30 ECTS and one academic year 60 ECTS.

## ASSESSMENT/GRADING

The courses are assessed based on your performance and measured against the learning goals. Each lecturer defines the means for assessment for each course. The universities of applied sciences are practically oriented and therefore we value applying the information you have learned instead of learning by heart and memorising the information. We have very few exams and rely on other means of assessment. The assessment criteria will be presented during the first lectures and can include, for example:

- participation in class
- learning diaries
- peer evaluation
- exams
- presentation
- assignments and reports
- group work





To accommodate different learning styles, the lecturers in the Sustainable bioeconomy semester have defined two optional ways for completing the course. One is based more on participation in classes and group work and the other more on independent learning.

Karelia UAS uses a grading scale of 1-5 or pass/fail. You will find information on the grading scale of the course in the course descriptions.

## **DEADLINES**

The lecturer can set certain deadlines for the assignments. The deadlines are set for two reasons: fair and equal treatment of all students and to allow the lecturer enough time to review the assignments. If no specific deadlines are set, the last day of the course is the deadline. If you return the assignments late, the lecturer has the right to reduce the grade.





## **ATTENDANCE AND PARTICIPATION**

The strength of a multicultural group is learning to work in diverse settings, with different cultural backgrounds and ways of working in groups. You might find it challenging but trust us, you will always learn something! The working methods applied at Karelia UAS will prepare you for your future working life and improve your understanding of cultural issues and working in groups.

The Sustainable bioeconomy and business semester is a very intensive module and we encourage you to take advantage of the opportunity to learn and share in a multicultural group. The schedules can be rough and your school days long. We strongly recommend that you use weekdays for studies and weekends, public holidays and spring break (week 10) for travelling.

Karelia UAS does not generally have mandatory participation in class. You are expected to take responsibility of your studies, including your decision on whether to attend class or not. Although there may not be compulsory participation, the lecturer can set some parts of the course as compulsory. On average, visits, excursions, visiting lecturer lectures, lab work and field work are mandatory.

Many courses have group work in addition to individual assignments. If group work is assigned, all group members should participate equally. Only those group members who participate in the group work in a fair and equal manner, will be graded.

If you are ill or have other extreme circumstances, you should inform the lecturer by email or sms of your absence. The lecturer can give you a substitutive assignment.

## **PLAGIARISM**

Plagiarism (copying other people's work and presenting as you own without giving due credit), cheating and deceit are strictly forbidden and will end up in failing the complete course. Use appropriate referencing in assignments and ask the lecturer if in doubt. Information on referencing other people's work is available in the Karelia UAS' Student intranet Pakki.



The curriculum and material were developed in the Erasmus+ Knowledge Alliance project  
**ERDI – Empowering Regional Development and Innovations** as part of the project outcomes.



Co-funded by the  
Erasmus+ Programme  
of the European Union

THIS PROJECT HAS BEEN FUNDED  
WITH SUPPORT FROM  
THE EUROPEAN COMMISSION  
FOR YEARS 2016 - 2018.

562603-EPP-1-2015-1-FI-EPPKA2-KA