# 宇都宮大学大学院

# 地域創生科学研究科

# Utsunomiya University Graduate School Graduate School of Regional Development and Creativity







## 地域創生科学研究科の理念

# Philosophy of the Graduate School of Regional Development and Creativity

21世紀の課題を解決して持続可能な豊かな地域社会の創生に貢献するために、社会デザインとイノベーションの 創造を支える高度な人材を育成するとともに、STI for SDGsに資する特長的で強みのある研究を推進します。

In order to address 21st-century issues and contribute to the construction of sustainable and prosperous local communities, the School will train excellent human resources who will support the creation of social design and innovation, while promoting distinctive and competitive research in science, technology, and innovation for the Sustainable Development Goals (STI for SDGs).

#### 教育の特色 / Characteristics of Education

(1) 多様な分野の教員による研究指導 (1) Research guidance offered by faculty members from different fields 学生の専門分野だけでなく、異なる分野の教員による指導を受けることができ、幅広い視野を養うことができます。

Students can learn from faculty members in different fields, not just in their own field of specialization, which enables them to develop a broader perspective.

#### (2) 学際的な思考力・実践力に資する科目の配置

(2) Subjects designed to contribute to interdisciplinary thinking skills and practical skills

博士前期課程では、「地域創生リテラシー科目」や「境界・学際領域科目」を、博士後期課程では「副専門研修」や「臨地研究」を配置し、文理融合・分野融合を実現するためのカリキュラム構成としています。

The Master's Degree Program includes Regional Development Literacy subjects, as well as interdisciplinary subjects that transcend boundaries, while the Doctoral Degree Program includes Advanced Seminars on Minors and On-site Studies, creating a curriculum structure that integrates disciplines and combines the sciences with the humanities.

#### 育成する人材像 / Educational Mission

持続可能な豊かな地域社会を創生するために、社会デザインやイノベーションに関する高度な専門知識・技術を身に付けて、学際的思考力と実践力を備えて主体的に行動できる高度専門職業人を育成します。

In order to create sustainable and prosperous regional communities, the School equips its students with advanced expertise and skills pertaining to social design and innovation, and trains high-level specialists with interdisciplinary thinking skills, practical skills, and the ability to act independently.

## 地域創生科学研究科の考える「地域」について

## "Region" in the Graduate School of Regional Development and Creativity

地域創生科学研究科の考える「地域」とは、単純に地理的・物理的意味を単位とする特定の空間や範囲を示すものではなく、問題意識に応じて設定され、可変的で多様な性格を有する教育研究の対象を指しており、「ローカル/リージョナル/ナショナル/グローバル」の連結関係の中で構成されるものです。 栃木県、北関東に位置する大学として、地元の自治体、産業界、住民に資する取り組みを積極的に展開しながら、それぞれが重点を置く「地域」に対応したフィールド、具体的にはコミュニティレベルから、都市や地域、国土全体そして国際的なレベルまでを想定した幅広いフィールドを対象として教育研究を推進しています。

The School does not define "region" simply as a space or sphere in the geographical or physical sense of the word. According to our definition, "region" is a dynamic and diverse concept that refers to a research theme established in response to the issue at hand. Further, it is part of an interactive chain consisting of "local," "regional," "national," and "global" components.

As a university located in Tochigi Prefecture in the northern Kanto area, we actively pursue initiatives that contribute to the welfare of the local public sector, industry, and residents. In addition, we promote education and research encompassing diverse fields that correspond to the "regions" emphasized by each of these stakeholders. These fields include local communities, cities, regions (in the conventional sense of the term), the nation, and the international community.



## 地域創生科学研究科の組織図

## Organization Chart for the Graduate School of Regional Development and Creativity

#### 博士前期課程 社会デザイン科学専攻 Division of Social Design コミュニティデザイン学プログラム Graduate Program in Community Design Studies 農業・農村経済学プログラム Graduate Program in Agricultural and Rural Economics 建築学プログラム Graduate Program in Architecture and Building Engineering 土木工学プログラム Graduate Program in Civil Engineering 農業土木学プログラム Graduate Program in Irrigation, Drainage and Rural Engineering グローバル・エリアスタディーズプログラム Graduate Program in Global and Area Studies 多文化共生学プログラム Graduate Program in Multicultural Studies

地域人間発達支援学プログラム Graduate Program in Studies on Community and Human Development

#### 工農総合科学専攻 Division of Engineering and Agriculture

光工学プログラム Graduate Program in Optical Engineering
分子農学プログラム Graduate Program in Molecular Agriculture
物質環境化学プログラム Graduate Program in Material and Environmental Chemistry
農芸化学プログラム Graduate Program in Agricultural Biological Chemistry
機械知能工学プログラム Graduate Program in Mechanical and Intelligent Engineering
情報電気電子システム工学プログラム Graduate Program in Information, Electrical and Electronic Systems Engineering
農業生産環境保全学プログラム Graduate Program in Agricultural and Environmental Sciences
森林生産保全学プログラム Graduate Program in Forest Production and Conservation

#### 博士後期課程 先端融合科学専攻 Division of Advanced Transdisciplinary Science オプティクスバイオデザインプログラム Optics and Bio Design Program

先端工学システムデザインプログラム Advanced Engineering Systems Design Program

グローバル地域デザインプログラム Global and Regional Development Design Program

東京農工大学大学院連合農学研究科 UNITED GRADUATE SCHOOL OF AGRICULTURAL SCIENCE, Tokyo University of Agriculture and Technology

## 博士前期課程

## Master's Degree Program

文理融合・分野融合のためのカリキュラム構成として、持続可能な豊かな地域社会の創生に貢献するために、学際的思考力と実践力を養成する「地域創生リテラシー」を、境界領域・異分野の専門知識・技術を養成する「専門科目」の中に「境界・学際領域科目」を、研究テーマに関連して学位プログラム間の連携・融合を図るため「特別演習」、「特別研究」について、デュアル指導の体制を設けています。

As a curriculum structure that integrates disciplines and combines the sciences with the humanities, in order to help create sustainable and prosperous regional communities, the School offers Regional Development Literacy to cultivate students' interdisciplinary thinking skills and practical skills, as well as specialization subjects in interdisciplinary fields that transcend boundaries to develop their expertise and techniques. A dual guidance system is in place for Advanced Seminar and Advanced Research in order to promote collaboration and integration between graduate programs in relation to research themes.

## 地域創生リテラシー / Regional Development Literacy

社会の抱える問題・課題が高度化・複雑化しているなかで、博士前期課程修了生が高度専門職業人として指導的役割を果たすためには、専門的知識・技術の修得に特化するだけでなく、課題解決に向けて強靭にかつしなやかに対応する思考力と行動力を身に付ける必要があります。そのためには、目先の成果だけに捉われない雄大な構想や着想が重要であり、歴史を踏まえながら物事の本質について深く考える力や、実践的なコミュニケーション能力、グローバル化への対応力や協働性、従来の学術分野に捉われないで多面的な視野から課題に挑戦するチャレンジ精神等の養成が必要です。このことから、学際的思考力と実践力を養成する「地域創生リテラシー」を配置しています。

In order for students who have completed the Master's Degree Program to play leading roles as high-level specialists in a society confronting increasingly advanced and complex challenges, they must not only specialize in the acquisition of specific knowledge and skills—they also need to acquire the ability to think and act in a tenacious and flexible manner to solve problems. In order to do so, it is important for them to have grand ideas and concepts, without being solely concerned with short-term results. They must cultivate the ability to think deeply about the essence of things based on history, practical communication skills, the ability to adapt to globalization, the ability to work in a team, and a willingness to take on challenges and tackle them from a multilateral perspective, without being confined to conventional academic fields. For this reason, the School has established Regional Development Literacy to cultivate students' interdisciplinary thinking skills and practical skills.

#### 主な開講科目 / Main Subjects Offered

「地域創生デザイン&イノベーション」Design and Innovation for Regional Creation

: 連携・融合のための根源的視野(異分野の学生が混在するグループワーク) A foundational perspective for collaboration and integration (group work with a mixture of students from different disciplines)

「アカデミックコミュニケーション I・II」 Academic Communication I/II

: 高度な学際的思考力とコミュニケーション能力を養成(多様な学生・教員・実務家によるゼミ) Development of advanced interdisciplinary thinking skills and communication skills (seminars with a diverse group of students, faculty members, and practitioners)

## 境界·学際領域科目 / Interdisciplinary Subjects That Transcend Boundaries

同じ学位プログラムの中でも専門性の異なる分野がみられることから、境界領域・学際領域の専門知識・技術を身に付けることを目的に、 単一の学位プログラムの共通科目として、又は、複数の学位プログラムの共通科目として全てのプログラムに対応した「境界・学際領域科 目」を配置しています。学生の研究テーマ・関心に即して境界・学際領域の専門知識・技術を身に付けることができます。

Since different fields of specialization exist even within the same Graduate Program, interdisciplinary subjects that transcend boundaries are offered in all programs—either as common subjects for a single Graduate Program, or as common subjects for multiple Graduate Programs—with the aim of equipping students with knowledge and skills in interdisciplinary fields that transcend boundaries, in line with their research themes and interests.

## デュアル指導体制 / Dual Guidance System

専門領域に加えて境界領域・学際領域の素養を身に付けて、幅広い視野や実践力を有する高度専門職業人を養成するため、特別演習、特 別研究の研究指導をデュアル指導体制で実施します。具体的には、主指導教員1名と副指導教員2名の3名で構成し、この内、第1副指 導教員は学位の専門性を担保するために同じ学位プログラムの教員から、第2副指導教員は、専門分野に対して境界領域や学際領域の 観点から学生の研究進捗や専門能力の修得に対して指導を行い、最終的に高度な専門力と実践力を有する人材を育成します。

To equip students with a grounding in interdisciplinary fields across boundaries, in addition to their area of specialization, and to nurture advanced professionals with broad perspectives and practical skills, the School provides research guidance for Advanced Seminar and Advanced Research via a dual guidance system. Specifically, the system consists of three people: one primary advisor and two secondary advisors. The first secondary supervisor is a faculty member from the same Graduate Program to guarantee the expertise of the degree. The second secondary supervisor provides guidance to students on their research progress and the acquisition of specialized skills in their particular fields from the perspective of interdisciplinary fields across boundaries, which ultimately develops human resources who have advanced specialized and practical skills.

## 学位プログラム紹介 Introduction to Graduate Programs

## 社会デザイン科学専攻 / Division of Social Design

地域社会に関するソフトウェア(コミュニティ、社会制度、文化、政策等)やハードウェア(建築、国土保全、環境等)のデザインに 貢献できる高度専門職業人を育成します。

Cultivate advanced professionals who can contribute to the design of software (community, social system, culture, policy, etc.) and hardware (building, national land conservation, environment, etc.) in relation to the community.

## コミュニティデザイン学プログラム Graduate Program in Community Design Studies

学位名称 修士(学術) Degree Master of Arts

## コミュニティの今に寄り添い、「実践知」を探求します

Staying close to communities in the present day, and pursuing practical knowledge

修得できる能力(DP) Diploma Policies

- ■地域の社会システム, 資源, 課題等を高度かつ学際的に理解する能力 Acquire the ability to understand the regional social system, resources, issues, etc. from a high-level and interdisciplinary perspective.
- ■急速な社会の変容や多様化、複雑化する地域課題に学際的な視点から向き合い、地域社会をより豊かにし、持続可能にするために求められるコミュニティデザインを実 現する能力 Acquire the ability to realize community design required for more sustainable and prosperous community, having faced rapid social changes and diversity, and further complicated regional problems from an interdisciplinary perspective.
- ■コミュニティにおける様々なテーマに対して、適切な分析アプローチを、深い理解とともに、適用する能力 Acquire the ability to apply some appropriate analysis approach to various theme in community with deeper understanding
- ■コミュニティの多様な主体による現場の実践知を学術的に分析し、現場に還す能力 Acquire the ability to analyze practical knowledge among various entities in the community academically and reflect its perception into the community.

コミュニティ政策論, 自然共生デザイン論, まちをつくる経済評価の技法, 観光地理学研究 Community Policy, Regional design in harmony with Nature, Economic Evaluation Method, Studies in Tourism Geography





JP: https://www.utsunomiya-u.ac.jp/grdc/social-design-science/community\_design.html

EN: https://www.utsunomiya-u.ac.jp/grdc/en/social-design-science/community\_design.html



## 農業・農村経済学プログラム Agricultural and Rural Economics

#### 学位名称 修士(農学) Degree Master of Agriculture

## 食料・農業・農村を軸に、持続可能な社会を考えます

#### Considering a sustainable society based on food, agriculture, and farming areas

#### 修得できる能力(DP) Diploma Policies

- ■食料・農業・農村に関する制度・政策等の在り方を解明するのに必要不可欠な学術理論を高度かつ学際的に理解する能力 Acquire the ability to understand academic theories sophisticatedly and interdisciplinary which are essential to interpret the modality of systems and policies about food, agriculture and rural communities.
- ■多様化する食料・農業・農村の諸問題に学際的な視点から向き合い、健康で豊かな国民生活や持続可能な社会に寄与する新しい食料・農業・農村の発展に貢献する能力 Acquire the ability to contribute to the development of new food, agriculture and rural communities which makes a contribution to healthy and affluent lives of the people and sustainable society, having faced various issues of diverse food, agriculture and rural communities from an interdisciplinary perspective.
- ■食料・農業・農村に関する様々なテーマに対して、適切な分析アプローチを、深い理解とともに、適用する能力 Acquire the ability to apply with deep understanding of appropriate approach in analysis to various themes regarding food, agriculture and rural communities.
- ■食料・農業・農村の多様な主体による現場の実践知を学術的に分析し、地域の現場に還す能力 Acquire the ability to analyze diverse food, agriculture and rural community- based on-site practical knowledge academically, and to give the knowledge back to regional site.

Course

農業・農村経済学,農政学,環境経済学,フードシステム学

Agricultural & Rural Economics, Agricultural policy, Environmental Economics, Food System





詳細はWEBサイトへ JP: https://www.utsunomiya-u.ac.jp/grdc/social-design-science/agriculture\_rural\_economics.html

Check the website for details EN: https://www.utsunomiya-u.ac.jp/grdc/en/social-design-science/agriculture\_rural\_economics.html

## 建築学プログラム Graduate Program in Architecture and Building Engineering

学位名称 修士(工学) Degree Master of Engineering

## サステナブルな社会を築く建築・都市をデザインします

#### Designing architecture and cities to build a sustainable society

#### 修得できる能力(DP) Diploma Policies

- ■地球環境・地域社会の変化に適応した良好な建築の創生あるいは再創生に関わる高度な工学的能力 Acquire advanced engineering ability related to excellent architectural creation or regeneration suitable for changes of global environment and community.
- ■多先端的な専門知識をもとに、地域の社会及び自然環境の変化を考慮して、建築に関わる実務的問題をローカルかつグローバルな視点で分析・解決し、建築・地域をデザ インする能力 Acquire the ability to design architecture and regions by analyzing/resolving practical issues in terms of architecture from a local and global perspective, considering changes of regional society and natural environment based on cutting-edge expertise.
- ■社会のニーズや自然環境の変化をとらえ, 建築学の新技術を創造する能力 Acquire the ability to create new engineering of architecture and building engineering by capturing social needs and changes of natural environment.
- ■国際社会でも通用する技術展開能力, コミュニケーション能力, キャリア開発能力 Acquire the ability of career development, communication skills and the ability to develop engineering that can be acceptable to international community.

エコロジカル建築特論A·B,都市解析特論A·B,建築耐震設計特論A·B,建築計画特論A·B Advanced Ecological Architecture A/B, Advanced Urban Analysis A/B, Earthquake Engineering for Building A/B, Advanced Architectural Planning A/B





詳細はWEBサイトへ JP: https://www.utsunomiya-u.ac.jp/grdc/social-design-science/architecture.html

EN: https://www.utsunomiya-u.ac.jp/grdc/en/social-design-science/architecture.html

## 土木工学プログラム Graduate Program in Civil Engineering

学位名称 修士(工学) Degree Master of Engineering

## 最先端の土木技術で社会イノベーションに貢献します

### Contributing to social innovation through cutting-edge civil engineering technology

#### 修得できる能力(DP) Diploma Policies

- ■地球環境の変化に適応した良好な社会基盤の整備に関わる高度な工学的能力 Acquire advanced engineering ability related to enhancement of excellent social infrastructure suitable for changes of global environment.
- ■先端的な専門知識をもとに、地域の社会及び自然環境の変化を考慮して、社会基盤に関わる実務的問題をローカルかつグローバルな視点で分析・解決し、地域をデザイ ンする能力 Acquire the ability to design regions by analyzing/resolving practical issues in terms of social infrastructure from a local and global perspective, considering changes of regional society and natural environment based on cutting-edge expertise.
- ■社会のニーズや自然環境の変化をとらえ、土木工学の新技術を創造する能力 Acquire the ability to create new engineering of civil engineering by capturing social needs and changes of natural environment.
- ■国際社会でも通用する技術展開能力, コミュニケーション能力, キャリア開発能力 Acquire the ability of career development, communication skills and the ability to develop engineering that can be acceptable to international community.

主な開講科目

耐震工学特論, 河川工学特論, 都市計画特論, 防災マネジメント特論

Advanced Seismic Engineering, Advanced River Engineering, Advanced Urban Planning, Advanced Disaster Reduction and Management





詳細はWEBサイトへ JP: https://www.utsunomiya-u.ac.jp/grdc/social-design-science/civil\_engineering.html

bsite for details EN: https://www.utsunomiya-u.ac.jp/grdc/en/social-design-science/civil\_engineering.html

農業土木学プログラム Graduate Program in Irrigation, Drainage and Rural Engineering

学位名称	修士(農学)
Degree	Master of Agriculture

## 持続可能な農業農村環境をデザインする能力を磨きます

#### Honing the ability to design sustainable agricultural and rural environments

#### 修得できる能力(DP) Diploma Policies

- ■地球環境の変化に適応した良好な農業農村基盤の整備に関わる高度な工学的能力 Acquire advanced engineering ability related to enhancement of excellent agricultural and rural foundation suitable for changes of global environment.
- ■先端的な専門知識をもとに、地域の社会及び自然環境の変化を考慮して、農業農村基盤に関わる実務的問題をローカルかつグローバルな視点で分析・解決し、地域をデ ザインする能力 Acquire the ability to design regions by analyzing/resolving practical issues in terms of agricultural and rural foundation from a local and global perspective, considering changes of regional society and natural environment based on cutting-edge expertise.
- ■社会のニーズや自然環境の変化をとらえ, 農業土木学の新技術を創造する能力 Acquire the ability to create new engineering of irrigation, drainage and rural engineering by capturing social needs and changes of natural environment.
- ■国際社会でも通用する技術展開能力, コミュニケーション能力, キャリア開発能力 Acquire the ability of career development, communication skills and the ability to develop engineering that can be acceptable to international community.

Course

農地保全学,農業水利学,応用田園生態工学A,地域マネジメントA

Soil and water conservation, Irrigation Water Management, Rural Eco-engineering A, Rural Management for Sustainable Development A





詳細はWEBサイトへ JP: https://www.utsunomiya-u.ac.jp/grdc/social-design-science/agricultural\_civil\_engineering.html

ebsite for details EN: https://www.utsunomiya-u.ac.jp/grdc/en/social-design-science/agricultural\_civil\_engineering.html

## グローバル・エリアスタディーズプログラム Global and Area Studies

学位名称 修士(国際学) Master of Global Studies Degree

## グローバル時代における社会の理想像を探求します

#### Exploring the ideals of society in a global age

#### 修得できる能力(DP) Diploma Policies

- ■国際開発や国際協力等に関する高度な専門知識・技術を身に付けて、グローバルな諸問題を理解し解決する能力 Acquire the ability to understand and resolve various global problems equipped with advanced expert knowledge and engineering of international development and global cooperation.
- ■世界各地の政治・社会の多様性等に関する高度な教養を身に付けて、課題に対する学際的な思考能力 Acquire interdisciplinary intellect for issues equipped with advanced culture for political and social diversity all over the world.
- ■日本及び世界各国の諸問題・諸課題に対して、グローバルな観点から問題解決を実践するために具体的な情報収集、調査・分析する能力 Acquire the ability to investigate/analyze and collect specific information in order to practice problem-solving ability of various problems/issues in Japan and worldwide from a global perspective.
- ■グローバルな実務に対応可能な企画・提案能力とコミュニケーション能力 Acquire the ability to plan/propose and communication skills that can be applied to global practices.

環境問題とガバナンス↓・Ⅱ,東アジアの国際政治と歴史↓・Ⅱ,ラテンアメリカの経済と社会↓・Ⅲ,東アフリカの社会開発と文化↓・Ⅱ Environmental Governance I/II, History of International Relations in East Asia I/II, Economy and Society in Latin America I/II, Social Development and Culture in East Africa I/II





JP: https://www.utsunomiya-u.ac.jp/grdc/social-design-science/global\_area\_studies.html

EN: https://www.utsunomiya-u.ac.jp/grdc/en/social-design-science/global\_area\_studies.html

## 多文化共生学プログラム Graduate Program in Multicultural Studies

学位名称 修士(学術) Degree Master of Arts

## 新しい時代にふさわしい多文化共生の在り方を模索します

#### Seeking multicultural ways of life that are appropriate for the new era

#### 修得できる能力(DP) Diploma Policies

- ■多文化共生学に関する高度な専門知識・技術を身に付けて、世界様々な地域の文化的・社会的問題を理解し解決する能力 Acquire the ability to understand and resolve cultural/social problems in various regional parts of the world equipped with advanced expert knowledge and engineering of multicultural studies.
- ■多文化共生に関する諸課題について、調査、情報収集、分析する能力 Acquire the ability to investigate, collect information and analyze various issues regarding multicultural society.
- ■多文化共生に関する諸活動において活用できる学際的な思考力及び異文化間コミュニケーション能力 Acquire interdisciplinary intellect and intercultural communication skills which can be utilized in various activities related to multicultural society.
- ■複数の言語で情報を収集・発信するスキル・リテラシー Acquire skills and literacy to collect and disseminate information in many languages.

日本文学研究 |・||, イギリス文化研究 |・||, 人権と法 |・||, 英語学研究 |・|| Studies on Japanese Literature 1/II, Culture of Britain I·II, Legal Perspectives on the Human Rights 1/II, English Linguistics 1/II





JP: https://www.utsunomiya-u.ac.jp/grdc/social-design-science/multicultural\_symbiosis.html

osite for details EN: https://www.utsunomiya-u.ac.jp/grdc/en/social-design-science/multicultural\_symbiosis.html

地域人間発達支援学プログラム Studies on Community and Human Development

学位名称	修士(学術)
Degree	Master of Arts

## 地域における最適な人材育成を多面的に考察します

Considering optimal human resource development in regional areas from multiple perspectives

#### 修得できる能力(DP) Diploma Policies

- ■人間発達支援学に関する高度な専門知識・技術を身に付けて、社会的課題を理解し解決する能力 Acquire the ability to understand and resolve social problems equipped with advanced expert knowledge and engineering of studies on community and human development.
- ■多様な地域や家庭で育つ子どもや青少年の発達・成長を支援するのに必要な、学際的な思考力や課題の分析能力 Acquire interdisciplinary intellect and the ability to analyze issues necessary to support development and growth of children and young people who grow up in diverse region and family.
- ■学校や地域の教育・生活・環境・医療・芸術等の関係機関や団体と連携し、多様な学びを支援する環境創造に必要な実践力や協働力 Acquire the ability to cooperate necessary to collaborate and support with pertinent organizations such as schools, regional education, community, environment, medical, arts, etc.
- ■地域の人間発達支援の実践者として求められる高度なリーダーシップやコミュニケーション能力 Acquire advanced leadership and communication skills necessary for a practitioner of community and human development.

Advanced Studies in Methods of Human Development Promotion, Studies in Supporting Lifespan Development, Advanced Studies in Environmental Systems and Societies, Advanced Studies in Information Science & Technology





JP: https://www.utsunomiva-u.ac.ip/grdc/social-design-science/regional human development support.html

Check the website for details EN: https://www.utsunomiya-u.ac.jp/grdc/en/social-design-science/regional\_human\_development\_support.html

## 工農総合科学専攻 / Division of Engineering and Agriculture

工学分野と農学分野に関するものづくり、食料・農林業・環境を支えるイノベーションの創造やマネジメントに貢献できる高度専門職業人を育成します。

Develop highly skilled professionals who can contribute to the creation and planning related to engineering and agriculture as well as creation of innovation to support food, agriculture and forestry, and environment.

## 光工学プログラム

Optical Engineering

#### 学位名称 修士(光工学) Master of Optical Science Degree and Engineering

## 先端光工学を駆使して生命と生活を守り. 産業を支えます

Leveraging cutting-edge optical engineering to protect people's lives and livelihoods, in addition to supporting industry

#### 修得できる能力(DP) Diploma Policies

- ■グローバルな視野を持ち、21世紀の光工学の諸問題を解決し、産業の発展に貢献するために必要な高度な光工学に関する知識・技術 Acquire knowledge and skills related to advanced optical engineering necessary to contribute to the development of industry while solving various issues with optical engineering in the 21st century from a global perspective.
- ■最先端光工学の基盤となる基礎知識・基礎技術を身に付け、それを工学的に応用できる実践的能力 Acquire practical ability to apply basic knowledge/engineering learned from the course which serves as a foundation to advanced optical engineering in an engineering manner.
- ■企業等に就職して光学技術の創造・発展に大きく貢献する実践的な技術者・研究者となる能力を修得及び博士後期課程へ進学して最先端光工学の発展を担う人材となる能力 Acquire the ability to be a practical engineer/researcher who makes a significant contribution to the creation and development of optical engineering while working in the company, etc., and the ability to become an asset to the development of advanced optical engineering having continued to doctor's course in the graduate school.
- ■光工学に関する多様な場面で実践できる高度なコミュニケーション能力 Acquire the advanced communication skills which can be practiced in various scenes related to optical engineering.

主な開講科目

基礎光学|・||, 波動光学|・||, 光学設計, 画像工学

Fundamental Optics I / II, Wave-optical Engineering I / II, Optical Design, Image Processing





詳細はWEBサイトへ JP: https://www.utsunomiya-u.ac.jp/grdc/agricultural/light\_engineering.html

EN: https://www.utsunomiya-u.ac.jp/grdc/en/agricultural/light\_engineering.html

## 分子農学プログラム Graduate Program in Molecular Agriculture

学位名称 修士(分子農学) Master of Degree Molecular Agriculture

## 先端生命科学の「知」を活用し「農」の未来に貢献します

Utilizing the knowledge of advanced life science to contribute to the future of agriculture

#### 修得できる能力(DP) Diploma Policies

- ■グローバルな視野を持ち、21世紀の生命・食糧・環境問題を解決し、産業の発展に貢献するために必要な高度な分子農学に関する知識・技術 Acquire advanced knowledge and engineering of molecular agriculture in order to resolve life/food/environment related problems in the 21st century from a global perspective and contribute to the development of industry.
- ■遺伝情報及び、その発現機構を解析するために必要な最先端の解析技術 Acquire cutting-edge analysis technology necessary to analyze genetic information and its expression mechanism.
- ■遺伝情報の解析技術と、その発現制御機構を理解し有用な分子を農林水産分野で活用することにより新しい価値を創造できる能力 Acquire the ability to create new values by understanding analysis technology of genetic information and its expression control mechanism, and utilizing useful molecular in agricultural, forestry and fishery fields.
- ■分子農学に関する多様な場面で実践できる高度なコミュニケーション能力 Acquire advanced communication skills that can be used in various scenes related to molecular agriculture. 植物分子保護学,植物分子遺伝育種学,動物分子生理学,動物生殖遺伝学

Molecular Plant Protection, Plant Molecular Genetics and Breeding,

Molecular Physiology in Animal Science, Genetics and Reproduction in Animal Science



JP: https://www.utsunomiya-u.ac.jp/grdc/agricultural/molecular\_agriculture.html

bsite for details EN: https://www.utsunomiya-u.ac.jp/grdc/en/agricultural/molecular\_agriculture.html

物質環境化学プログラム Graduate Program in Material and Environmental Chemistry

学位名称	修士(工学)
Degree	Master of Engineering

## 工学・農学の枠を超えた創造的な化学領域を開拓します

Pioneering creative chemistry fields which transcend the boundaries of engineering and agriculture

修得できる能力(DP) Diploma Policies

- ■21世紀の化学技術に関する諸問題を解決し、持続可能な豊かな地域社会の創生に貢献するために、物質化学や工学の高度な知識と技術 Acquire advanced knowledge and engineering of material chemistry and engineering in order to resolve various chemical engineering related problems in the 21st century and contribute to the creation of a sustainable and prosperous community.
- ■物質環境化学の専門知識を高機能性成分開発や環境保全技術に活用できる主体的な行動力 Acquire proactive initiative to utilize expert knowledge of material and environmental chemistry to the development of high functional ingredients and environmental conservation technology.
- ■物質化学に加え生命化学的な視座を持った分野横断的な創造的実践力をもって応用開発に取り組むことのできる能力 Acquire the ability to implement application development equipped with creative and practical skills across interdisciplinary fields from material chemistry as well as life chemistry viewpoints.
- ■物質環境化学に関する多様な場面で実践できる高度なコミュニケーション能力 Acquire advanced communication skills which can be used in various situations related to material and environmental chemistry.

物理化学要論,分子構造化学,分子機能化学,物質・環境工学

Elements of Physical Chemistry, Molecular Structure Chemistry,

Chemistry of Functional Molecules and Materials, Material and Environmental Engineering

JP: https://www.utsunomiya-u.ac.jp/grdc/agricultural/material\_environmental\_chemistry.html

EN: https://www.utsunomiya-u.ac.jp/grdc/en/agricultural/material\_environmental\_chemistry.html



## 農芸化学プログラム Graduate Program in Agricultural Biological Chemistry

学位名称 修士(農学) Master of Agriculture Degree

## 微生物と食の専門性を活用し持続可能な開発に貢献します

Contributing to sustainable development by leveraging expertise in microbiology and food

修得できる能力(DP) Diploma Policies

- ■21世紀の農芸化学に関する諸問題を解決し、持続可能な豊かな地域社会の創生に貢献するために、生命化学や農学の高度な知識と技術 Acquire advanced knowledge and engineering of life chemistry and agriculture in order to resolve agricultural biological chemistry related problems in the 21st century and contribute to the creation of a sustainable and prosperous community.
- ■生物資源に広く関連した化合物の構造と反応性や、生物との関わりを中心とした機能性に関する知識や実験手法・技術 Acquire knowledge and experimental approach/engineering related to functionality based on compound structure and responsiveness which are widely associated with biological resources, and involvement with living organism.
- ■生命化学に加え化学工学的な視座を持った分野横断的な創造的実践力をもって応用開発に取り組むことのできる能力 Acquire the ability to deal with application development with interdisciplinary creative and practical skills from a life chemistry and chemistry engineering viewpoints.
- ■農芸化学に関する多様な場面で実践できる高度なコミュニケーション能力 Acquire advanced communication skills that can be used in various scenes related to agricultural biological chemistry.

フロンティア農芸化学, 生理活性物質化学, 栄養生理化学, 植物機能化学

The Frontier of Agricultural Biological Chemistry, Chemistry of Physiologically Active Substances, Nutritional and Physiological Chemistry, Plant Functional Chemistry





JP: https://www.utsunomiya-u.ac.jp/grdc/agricultural/agricultural\_chemistry.html

EN: https://www.utsunomiya-u.ac.jp/grdc/en/agricultural/agricultural\_chemistry.html

# 機械知能工学プログラム Graduate Program in Mechanical and Intelligent Engineering

学位名称 修士(工学) Degree Master of Engineering

## 新たな時代で必要とされる知能機械の可能性を追求します

Pursuing the possibilities of intelligent machines needed in the new era

修得できる能力(DP) Diploma Policies

- ■21世紀の機械知能工学に関する諸問題を解決し、持続可能な豊かな地域社会の創生に貢献するために、機械知能工学の高度な知識・技術 Acquire advanced knowledge and engineering of mechanical and intelligent engineering in order to resolve mechanical and intelligent engineering related problems in the 21st century and contribute to the creation of a sustainable and prosperous community.
- ■電子・制御等との分野横断から、複数分野の技術を活用した技術の高度化、機械の知能化を実践する能力 Acquire the ability to practice technology elevation and machine intelligence that utilize engineering in multiple fields across interdisciplinary fields with electronic/control, etc.
- ■課題解決に即したものづくりが実践できる能力 Acquire the ability to practice manufacturing based on problem solution.
- ■機械知能工学に関する多様な場面で実践できる高度なコミュニケーション能力 Acquire advanced communication skills that can be used in various scenes related to mechanical and intelligent engineering.

主な開講科目

実験流体力学, 生産技術工学, 力学系理論, 知能ロボット

Experimental Fluid Dynamics, Manufacturing Technology Engineering, Dynamical systems theory, Intelligent Robotics





JP: https://www.utsunomiya-u.ac.jp/grdc/agricultural/machine\_intelligence\_engineering.html

情報電気電子システム工学プログラム Graduate Program in Information, Electrical and Electronic Systems Engineering

学位名称	修士(工学)
Degree	Master of Engineering

## ヒトとモノを繋ぐ新たな情報・通信・エレクトロニクス融合技術の創生を目指します

Aiming to create new fusion technologies for information, communication, and electronics that connect people with things

#### 修得できる能力(DP) Diploma Policies

- ■21世紀の情報電気電子分野に関する諸問題を解決し、持続可能な豊かな地域社会の創生に貢献するために、情報電気電子システム工学の高度な知識・技術 Acquire advanced knowledge and engineering of information, electrical and electronic systems engineering in order to contribute to the creation of a sustainable and prosperous community while resolving various issues in information, electrical and electronic fields in the 21st century.
- ■情報電気電子システム工学の基本的かつ普遍的な知識・技術を深く身に付け、第三者に伝授できる能力 Acquire the ability to transmit the fundamental and universal knowledge/engineering of information, electrical and electronic systems engineering acquired profoundly to a third party.
- ■情報電気電子システムに関連する応用構想、設計、研究、製作等の過程を広い視野を持ち自律的に実践できる能力 Acquire the ability to autonomously practice the processes of application concept, design, research, manufacturing, etc. related to information, electrical and electronic systems from a wide perspective.
- ■情報電気電子システム工学に関する多様な場面で実践できる高度なコミュニケーション能力 Acquire advanced communication skills that can be used in various scenes related to information, electrical and electronic systems engineering.

Course

大規模システム最適化, 情報量統計学, 電子材料工学特論, 電気自動車

Optimization Techniques for Large Scale Systems, Information Statistics, Advanced Electronic Materials Engineering, Electric Vehicle





JP: https://www.utsunomiya-u.ac.jp/grdc/agricultural/information\_electrical\_electronic\_system.html

ck the website for details EN: https://www.utsunomiya-u.ac.jp/grdc/en/agricultural/information\_electrical\_electronic\_system.html

## 農業生産環境保全学プログラム Agricultural and Environmental Sciences

学位名称 修士(農学) Master of Agriculture Degree

## 農の持続的発展と環境保全に資する人材育成にコミットします

Committing to human resource development which contributes to sustainable development and environmental conservation for agriculture

#### 修得できる能力(DP) Diploma Policies

- ■21世紀の農学に関する諸問題を解決し、持続可能な豊かな地域社会の創生に貢献するために、農業生産環境保全学の高度な知識・技術 Acquire advanced knowledge and engineering of agricultural and environmental sciences in order to resolve various agricultural problems in the 21st century and contribute to the creation of a sustainable and prosperous community.
- ■従来の専門領域を超える柔軟な発想と実践で培った課題解決能力で未来を拓く、省力・安定・安全な農業生産技術の開発に挑戦できる能力 Acquire the ability to challenge the development of labor-saving/stable/safe agricultural production engineering that opens the way to the future by problem solution skills cultivated by flexible mindset and practice exceeding conventional specialized field.
- ■近年進歩著しいパイオテクノロジー、機器・化学分析、ICT、IoTなどの技術を活用して省力・高品質生産を実現する新たな農業に関する知識と技術 Acquire knowledge and engineering related to new agriculture that realizes labor- saving/high quality production utilizing technologies such as biotechnology, which is remarkable in its improvement recent years, instrumental/chemical analysis, ICT and IoT.
- ■農業生産環境保全学に関する多様な場面で実践できる高度なコミュニケーション能力 Acquire advanced communication skills that can be used in various scenes related to agricultural and environmental sciences.

作物品種改良学, 動物行動管理学, 生物生産機械学, 食品流通工学

Breeding Science of Crops, Animal Behavior Management, Agricultural Machinery, Food Distribution Engineering





詳細はWEBサイトへ JP: https://www.utsunomiya-u.ac.jp/grdc/agricultural/agricultural\_production\_environmental\_conservation.html

EN: https://www.utsunomiya-u.ac.jp/grdc/en/agricultural/agricultural\_production\_environmental\_conservation.html

## 森林生産保全学プログラム Graduate Program in Forest Production and Conservation

学位名称 修士(農学) Degree Master of Agriculture

## 世紀を超えた森林・林業のグランドデザインを描きます

Sketching a grand design for forests and forestry that transcends centuries

#### 修得できる能力(DP) Diploma Policies

- ■21世紀の林学に関する諸問題を解決し、持続可能な豊かな地域社会の創生に貢献するために、森林生産保全学の高度な知識・技術 Acquire advanced knowledge and engineering of forest production and conservation in order to contribute to the creation of a sustainable and prosperous community while resolving various problems with forestry in the 21st century.
- ■「専門技術者・研究者」として必要な森林の管理・育成から林産物の加工・利用にいたる高度な知識を有し、森林資源の利活用を推進できる実践力 Acquire the practical skills to implement utilization of forest resources, equipped with advanced knowledge from management/cultivation of forest to process/usage of forestry products as a "professional engineer/researcher"
- ■森林に関わる諸問題に対して、その解決に向け、理論と実践に基づいた自立的な取組を遂行できる能力 Acquire the ability to carry out self-sustaining activity based on theory and practice in order to solve various problems with forest.
- ■森林生産環境保全学に関する多様な場面で実践できる高度なコミュニケーション能力 Acquire advanced communication skills that can be used in various scenes related to forest production and conservation.

主な開講科目

森林管理政策学, 森林工学, 森林資源管理学, 森林生産学

Policy for Forest Management, Forest Engineering, Forest Products Management, Silviculture and Utilization for Forest Products





詳細はWEBサイトへ JP: https://www.utsunomiya-u.ac.jp/grdc/agricultural/forest\_production\_conservation.html

Check the website for details EN: https://www.utsunomiya-u.ac.jp/grdc/en/agricultural/forest\_production\_conservation.html



## 博士後期課程 Doctoral Degree Program

博士後期課程では、融合・多様化する分野に対応できる学際的思考力と実践力を養成する「副専門研修」、分野融合・学際的視点に基づく多元的な情報収集力と実践力を養成する「臨地研究」、また、それらを実現するため多様な分野の教員による指導体制を設けています。

The Doctoral Degree Program offers Advanced Seminars on Minors to cultivate students' interdisciplinary thinking skills and practical skills to deal with the combination and diversification of fields, as well as On-site Studies to develop their multi-dimensional information gathering and practical skills based on interdisciplinary perspectives from a combination of fields. A guidance system with faculty members from various fields has also been established to achieve these goals.

## 副専門研修 / Advanced Seminars on Minors

異分野教員の指導を通した幅広い視野と多面的な視点の獲得のために、選択必修科目「副専門研修」が用意されています。融合・多様化する分野に対応できる学際的思考力と実践力を養成するため、本科目では、副指導教員(融合教育)が指導します。

異分野の専門知識と研究手法の修得とそれらを具体的に実践する実習・演習、異分野教員との議論を通して、幅広い視野と多面的な視点を身につけます。

さらに修得した異分野の手法を、論文研究課題の手法へ応用する可能性や、新たな展開・発展へのきっかけとできるかを考察し、研究課題遂行の実践力の幅を広げ、その向上につながるよう学んでいきます。

Advanced Seminars on Minors are required elective subjects aimed at fostering a broad perspective and multi-faceted viewpoints through instruction by faculty from other disciplines. These seminars are taught by assistant supervisors (integrated education) who encourage the cross-disciplinary thinking and practical skills necessary for increasingly integrated and diverse fields.

Students obtain wide-ranging perspectives and multi-faceted viewpoints by specialized knowledge and research methods found in other disciplines, workshops, and practical exercises, and discussion with teaching staff from other disciplines. Students apply the methods of other disciplines for their own dissertation research, or use them to forge new research directions and developments, thereby advancing and increasing the practical scope of their dissertation research.

#### 臨地研究 / On-site Studies

分野融合・学際的視点に基づく多元的な情報収集力と実践力を養成する「臨地研究」では、幅広い視野と多面的な視点に加えて、多元的な情報収集力と実践力の獲得を目指します。

本科目では、副指導教員(融合教育)を主担当教員とし、主指導教員、副指導教員(研究)が共に、フィールドワークやインターンシップ等の実践活動の指導を行います。

フィールドワークやインターンシップ等の活動においては、分野横断・融合的専門知識の修得や多元的情報収集能力の獲得のほか、さまざまな場を活用し、自らの専門知識を説明、伝達し、共有化を図ることが義務づけられており、学識の教授能力の涵養を行います。

On-site Studies aim to foster the ability to collect and use multi-dimensional data, based on disciplinary integration and multi-disciplinary viewpoints. In addition to acquiring wide-ranging perspectives and multi-faceted viewpoints, students acquire the skills to collect and utilize multi-dimensional data.

For this subject, assistant supervisors (integrated education) act as chief supervisors, while chief supervisors and assistant supervisors (research) together provide guidance for practical activities during fieldwork or internships.

For fieldwork and internships, students obtain cross-disciplinary and integrated specialist knowledge and the ability to collect multi-dimensional data. The students must plan to utilize a range of settings, to explain, disseminate and share their own specialist knowledge, thereby fostering the teaching abilities required in an academic career.

## 多様な分野の教員による指導 / A multi-disciplinary teaching staff

専攻共通の必修科目ならびに選択必修科目では、多様な分野の複数の教員による指導を受けることができます。

学生の教育研究指導には、主指導教員 1 名、研究指導担当の副指導教員(研究) 2 名以上、融合教育担当の副指導教員(融合教育) 2 名以上、合計5 名以上が割り当てられます。

※主指導教員と副指導教員(研究):論文課題の研究領域の教員/副指導教員(融合教育):論文課題の研究領域以外の分野の教員

Instruction in common required elective subjects, and is provided by multiple teaching staff with diverse disciplinary backgrounds. Students are instructed by 5 or more staff members, including:

1 chief supervisor ,2 or more assistant supervisors in charge of research ,2 or more assistant supervisors in charge of integrated education

\*\*Chief and assistant research supervisors: Dissertation research supervision/Assistant integrated education supervisors: Supervision of non-dissertation research

## 先端融合科学専攻 / The Division of Advanced Trans-disciplinary Science

従来の分野にとらわれない俯瞰的視野から実践的な行動力を身に付けて、持続可能で豊かな地域社会の創生のために、それらをリードする新しい社会デザインの構築やイノベーションを創造するための人材を育成します。

The Division will foster practical skills based in holistic perspectives not encompassed by conventional fields, and will produce students capable of innovation and building new social designs, leading to the creation of sustainable and prosperous regional societies.

#### オプティクスバイオデザインプログラム The Optics and Bio Design Program

学位名称 博士(光工学)博士(農学)博士(工学)

Degree

Doctor of Optical Science and Engineering Doctor of Agriculture / Doctor of Engineering

光工学と分子農学の分野を中心に、目に見えない遺伝情報と目に見える生命現象 すなわちビッグデータである遺伝子の解析と農業現場での応用が結びつくような生物科学と、 多様な観点からの光工学技術、そして生物学と光学を結ぶ化学の分野を融合したプログラム

The Optics and Bio Design Program encompasses the fields of optical engineering and molecular agriculture. The program integrates biological sciences that link genetic information invisible to the human eye, with visible life forms - connecting the analysis of genetic 'big data' with agricultural applications. It incorporates a diverse range of optical technologies as well as chemistry, linking the fields of biology and optics

修得できる能力(DP) Diploma Policies

to the development of industry.

- ■STI for SDGs に寄与するというグローバルな視野を持ち,21世紀の光工学,生命,食糧,環境に関る諸問題を解決し,産業の発展に貢献するために必要な,高度な光工学,分子農 学, または, 化学に関する知識・技術 Successful candidates shall possess global perspectives in order to contribute to science, technology, and innovation for the Sustainable Development Goals (STI for SDGs) as well as advanced knowledge and technical skills in optical engineering, molecular agriculture, or chemistry. These are necessary to resolve 21st century problems relevant to optical engineering, life systems, food supply and the environment, as well as to contribute
- ■最先端光工学の基盤となる基礎知識・基礎技術、または、遺伝情報の解析技術や生物科学分野、化学分野の基礎技術を企業や自治体等において応用できる実践的能力 Successful candidates shall possess the fundamental knowledge and technical skills that form the basis of cutting-edge studies in optical engineering. Students should also be skilled in the application of technologies to analyze genetic information, as well as foundational skills in biochemistry and chemistry, within industrial and governmental contexts.
- ■専門とする分野に関する多様な場面で実践できる高度なコミュニケーション能力 Successful candidates shall possess high-level communication skills, allowing them to practice across a diverse range of contexts related to their field of specialization.

JP: https://www.utsunomiya-u.ac.jp/grdc\_d/outline/optics-and-bio.html

EN: https://www.utsunomiya-u.ac.jp/grdc\_d/en/outline/optics-and-bio.html



#### 先端工学システムデザインプログラム The Advanced Engineering Systems Design Program

博士(工学) Degree **Doctor of Engineering** 

感性工学やロボティクスを中心に、地域、社会における、物質、環境、電気電子、情報、機械、建築、まちづく り分野のはたすべき役割:基礎的研究から社会への普及、生活空間での利用・応用、人間との共生等、実用 化面も理解した国際的に通用する高度な先端技術者の育成のため、多彩な分野の融合したプログラム

The Advanced Engineering Systems Design Program encompasses the fields of robotics and Kansei engineering to address the role of materials, environments, electronics, information, machinery, building, and urban planning within regions and societies. It incorporates a range of disciplines aimed at training highly skilled engineers capable of producing internationally applicable solutions, ranging from basic research to social dissemination, as well as uses and applications in living environments and coexistence with human beings

#### 修得できる能力(DP) Diploma Policies

- ■STI for SDGs に寄与するというグローバルな視野を持ち、21世紀の工学に関る諸問題を解決し、持続可能な豊かな地域社会の創生に貢献するために必要な、高度な機械、情報、 電気電子, 化学, 建築, または, 建設技術に関する工学分野の知識・技術 Successful candidates shall possess global perspectives to contribute to science, technology, and innovation for the Sustainable Development Goals (STI for SDGs) as well as advanced knowledge and technical skills in mechanics, information, electronics, chemistry, architecture, and construction necessary to resolve 21st century problems relevant to engineering, and to contribute to the creation of sustainable and prosperous societies.
- ■最先端工学分野の基盤となる基礎知識・基礎技術を企業や自治体等において応用できる実践的能力 Successful candidates shall possess the fundamental knowledge and technical skills that form the basis of cutting-edge studies in engineering, and shall be able to apply the same within industrial and governmental contexts
- ■専門とする分野に関する多様な場面で実践できる高度なコミュニケーション能力 Successful candidates shall possess high-level communication skills allowing them to practice in a diverse range of contexts related to their field of specialization.

詳細はWEBサイトへ JP: https://www.utsunomiya-u.ac.jp/grdc\_d/outline/advanced-engineering-systems.html

EN: https://www.utsunomiya-u.ac.jp/grdc\_d/en/outline/advanced-engineering-systems.html



#### グローバル地域デザインプログラム The Global and Regional Development Design Program

学位名称 博士(国際学)博士(学術)博士(工学)

多文化共生、地域デザインを中心に、グローバル化に対応した持続可能な発展や豊かさと平和 の実現に向けた社会づくりのために、国際的な協力・開発・ガバナンスから地域社会の構築まで の現状と成り立ちを多様なスケールに対応した学際的で幅広い視点から理解するプログラム

**Doctor of International Studies** Doctor of Arts / Doctor of Engineering

The Global and Regional Development Design Program is focused on multicultural co-existence and regional design. It seeks to foster multi-disciplinary and wide-ranging understandings of the origins and current status of international cooperation, development, governance, and the organization of regional societies. This will promote sustainable development and prosperity in response to globalization and community building for the realization of peace

#### 修得できる能力(DP) Diploma Policies

- ■STI for SDGs に寄与するというグローバルな視野を持ち、多文化公共圏の形成や地域社会の構築に関わる諸問題を多様なスケールに対応した学際的で幅広い視点から解決し、持続可能な平和で豊か な地域社会の創生や多文化公共圏の形成に寄与するために必要な、地域や多文化共生に関わる人文諸学、社会科学、理学、または建築・建設工学に関する専門知識・技術 Successful candidates shall possess global perspectives to contribute to science, technology, and innovation for the Sustainable Development Goals (STI for SDGs) as well as advanced knowledge and technical skills in the humanities, social sciences, sciences, architecture, and construction necessary to solve problems arising from the creation of multi-cultural regions and communities from a broad, inter-disciplinary perspective. The student will be responsive to a range of scales, and contribute to the creation of sustainable and peaceful societies, as well as the formation of regional communities in which diverse cultures co-exist.
- ■多様な文化、地域を構成するコミュニティなどの社会的集団や制度、空間、システムなどに関わる基礎的知識を、国際社会、地域社会、市民組織、自治体や企業等において応用できる実践的能力 Successtul candidates shall possess fundamental knowledge related to social groups, spaces, and systems within communities that form diverse cultures and regions. The student shall be able to apply this knowledge within the international community, regional communities, citizen organizations, local governments, and business contexts.
- ■専門とする分野に関する多様な場面で実践できる高度なコミュニケーション能力 Successful candidates shall possess high-level communication skills allowing them to practice in a diverse range of contexts related to their field of specialization

JP: https://www.utsunomiya-u.ac.jp/grdc\_d/outline/global-and-regional-development.html

Degree





bsite for details EN: https://www.utsunomiya-u.ac.jp/grdc\_d/en/outline/global-and-regional-development.html

## / Entrance Fee, and Tuition

入学料 282,000円 授業料(年額)535,800円

Entrance fee: 282,000 yen Tuition: 535,800 yen (annual fee)

## 博士前期課程ホームページ / Master's Degree Program Website

JP: https://www.utsunomiya-u.ac.jp/grdc/

EN: https://www.utsunomiya-u.ac.jp/grdc/en/

## 博士後期課程ホームページ / Doctoral Degree Program Website

JP: https://www.utsunomiya-u.ac.jp/grdc\_d/

EN: https://www.utsunomiya-u.ac.jp/grdc\_d/en/ CN: https://www.utsunomiya-u.ac.jp/grdc\_d/cn/







## 大学院入試情報 / Graduate School Admissions Information

https://www.utsunomiya-u.ac.jp/admission/graduate.php



## 宇都宮大学ホームページ / University Website

JP: https://www.utsunomiya-u.ac.jp/









