

学際サイエンス・デザイン専門学群 <学士(学術)> コンピテンス一覧
 School of Transdisciplinary Science and Design <Bachelor of Arts and Science>

■汎用コンピテンス(学士課程) Generic Competences (Bachelor Program)

1	コミュニケーション能力 Communication ability	母語や外国語を適切に用いるとともに、各種メディアを利用したプレゼンテーション等を行うコミュニケーション能力 Communication ability to use the mother tongue and foreign languages properly and make presentations, etc. using various media
2	批判的・創造的思考力 Ability for critical and creative thinking	一般的・専門的知識の体系的理解をベースに批判的・創造的に思考する能力 Ability to think critically and creatively based on systematic understanding of general and specialized knowledge
3	データ・情報リテラシー Data and information literacy	様々な事象や情報を数量的手法やコンピュータ等を用いて適切に解析・処理する能力 Ability to properly analyze and process various events and information using quantitative methods, computers, etc.
4	広い視野と国際性 Broad perspective and international character	自身の専門に留まらず文化・社会と自然・物質に関して幅広く理解し、異文化を理解・尊重する能力 Ability to broadly understand culture, society, nature, and materials and understand and respect different cultures and be not only involved in one's own expertise
5	心身の健康と人間性・倫理性 Mental and physical health, humanity, and ethics	芸術やスポーツへの理解と実践等を通して心と身体の健康を保ち、人間性と倫理性を有する市民としての責任を自覚して実践する能力 Ability to maintain mental and physical health through the understanding, practice, etc. of arts and sports and be conscious of one's responsibility and put it into practice as a citizen with humanity and ethics
6	協働性・主体性・自律性 Cooperative, independent, and autonomous attitudes	チームワークやリーダーシップを通して様々な物事に対処し自己を管理しながら自律的に学び続け行動する能力 Ability to keep learning and act autonomously while dealing with a situation through team work and leadership and practicing self-management

■ 専門コンピテンス Specific Competences

1	データサイエンスを理解し利活用できる能力 Ability to understand and utilise data science	
1.1	数学の基礎能力 Basic mathematical skills	微積分、線形代数等、高等数学の基礎を理解し、自然科学や人文社会科学に関わるデータ解析に利用する能力 Ability to understand the fundamentals of higher mathematics, such as calculus and linear algebra etc., and utilise them to analyse data related to natural sciences, humanities and social sciences
1.2	統計学の基礎能力 Basic statistical skills	統計学の基礎を理解し、自然科学や人文社会科学に関わるデータ解析に利用する能力 Ability to understand the fundamentals of statistics, and utilise them to analyse data related to natural sciences, humanities and social sciences
1.3	ICTやAITを活用する能力 Ability to use ICT and AIT	自ら扱っている課題について、そこで集積されている様々な情報をどのように整理すればICTやAITを利活用できるか理解するとともに、実際に必要な情報整理を行い、これらを利活用する能力 Ability to understand how to utilise ICT and AIT by organising the various types of information accumulated on the issues to deal with, and to actually organise the necessary information and utilise them
2	地球規模課題解決の観点から、自然科学、人文社会科学を理解し利活用できる能力 Ability to understand and utilise natural sciences, humanities and social sciences from the perspective of solving global issues	
2.1	基礎学理としての自然科学の基礎に関する理解 Understanding of the fundamentals of natural sciences as basic academic principles	自然現象や様々な事象を論理的に理解、説明するために、基礎学理としての自然科学を利活用する能力 Ability to utilise natural sciences as basic academic principles to logically understand and explain natural phenomena and various events
2.2	人文社会科学の基礎に関する理解 Understanding of the fundamentals of the humanities and social sciences	人々が関わる様々な社会現象、社会問題等を論理的に理解、説明するために、人文社会科学を利活用する能力 Ability to utilise humanities and social sciences to logically understand and explain various social phenomena, social issues etc. involving people
3	環境学を理解し地球規模課題解決のために利活用できる能力 Ability to understand environmental studies and utilise it to solve global issues	
3.1	環境問題とその解決に関する理解 Understanding of environmental issues and their solutions	人類がこれまで経験した環境諸問題のメカニズムと解決法を、自然科学、人文社会科学の知識に基づき理解し、さらに地球規模課題解決に結びつけて考察する能力 Ability to understand the mechanisms and solutions to environmental issues experienced by human based on knowledge of natural sciences, humanities and social sciences, and to consider how they relate to the solution of global issues
3.2	地球規模での自然現象・人為課題に関する理解 Understanding of natural phenomena and human-made issues on a global scale	地球規模課題に関し、自然科学と人文社会科学を統合した環境学の基礎知識と技術をもって理解する能力 Ability to understand global issues with basic knowledge and skills in environmental studies integrating the natural sciences, humanities and social sciences
3.3	課題の設定ができる能力 Ability to set issues	探求し解決すべき課題を設定し、課題を理解するために必要な知識の修得と、課題解決に向けた諸要因の整理に関する方向性を定める能力 Ability to set issues to be explored and solved, acquire the knowledge necessary to understand the issues, and set direction regarding the organisation of various factors to solve the issues
3.4	Transdisciplinaryな思考能力 Transdisciplinary thinking skills	自然災害や人為的な環境改変等の諸課題が、互いにどのように連関しているかを理解するとともに、地球規模課題を専門的かつ俯瞰的に理解、説明し、その解決策を考察する能力 Ability to understand how various issues such as natural disasters and human-induced environmental changes are related to each other, and to understand and explain global issues from a professional and bird's eye view, and to consider solutions to such issues

4	多様な他者に敬意を払いつつ円滑なコミュニケーションをとる能力 Ability to communicate smoothly and respectfully with a diverse range of others	
4.1	国際的にも活躍できるコミュニケーション能力 Communication skills for international success	幅広い教養をベースに、異なる文化や考え方を背景とする人々と、円滑に英語、母語、日本語により、コミュニケーションをとる能力 Ability to communicate smoothly with people from different cultures and backgrounds in English, their mother tongue and Japanese, based on a broad range of academic knowledge
4.2	プレゼンテーション能力 Presentation skills	自分の考えを、異なる文化や考え方を背景とする第三者に論理的かつ明確に説明することができる能力 Ability to explain one's ideas in a logical and clear manner to a third party from different cultural and thinking backgrounds
4.3	柔軟な理解能力 Flexible comprehension skills	幅広い教養をベースに、異なる立場、あるいは対立する立場にいる人々の考えや論理を理解する能力 Ability to understand the ideas and logic of people in different or opposing positions based on a broad range of academic knowledge
4.4	自主性と行動力 Self-motivation and energy	問題に対して柔軟な思考を行い、かつ深い洞察に基づいて主体的に行動する能力 Ability to think flexibly about issues and act independently based on deep insights
5	日本文化や伝統の理解を通じた多様な価値観に基づき思考する能力 Ability to think based on diverse values through understanding of Japanese culture and traditions	
5.1	日本文化や伝統の理解 Understanding of Japanese culture and traditions	日本文化や伝統を理解し、これらを英語、母語、日本語により紹介する能力 Ability to understand Japanese cultures and traditions, and to introduce them in English, one's native language and Japanese
5.2	多様な文化や価値観の理解 Understanding of diverse cultures and values	様々な国籍の人々の文化的背景を互いに理解、尊重するとともに、多文化共生に必要な制度や考え方を考察し、地球規模の視点に立ち、人類の多様な背景、文化への理解を深化させる能力 Ability to mutually understand and respect the cultural backgrounds of people of diverse nationalities, to consider the schemes and ideas necessary for multicultural symbiosis, and to deepen understanding of the diverse backgrounds and cultures of humankind from a global perspective

