

宇宙地球フロンティア国際卓越大学院プログラム コースワーク科目

List of Courses for the International Graduate Program for Excellence in Earth-Space Science (IGPEES)

<宇宙地球フロンティア講義 / Lectures on Earth-Space Frontier Science>

開講所属 Offered by	開講科目名	Course title	単位 Credits	科目番号 Course Code
理学系研究科物理学専攻 Dept. of Physics, Graduate School of Science	生物物理学Ⅱ	English for Scientific Researchers I	2	35603-0051
	科学英語演習Ⅰ（物理・天文）	English for Scientific Researchers I	1	35603-0083
	宇宙物理学	Space Physics and Astrophysics	2	35603-0092
	宇宙物理学特論Ⅰ	Advanced Space Physics and Astrophysics I	2	35603-0101
	宇宙物理学特論Ⅱ	Advanced Space Physics and AstrophysicsⅡ	2	35603-0102
	重力波物理学	Gravitational-wave Physics	2	35603-0115
	最先端光科学講義Ⅴ	Lecture on Advanced Photon Science Ⅴ	1	35603-1605
理学系研究科天文学専攻 Dept. of Astronomy, Graduate School of Science	位置天文学特論Ⅰ	Positional Astronomy, Advanced Course I	2	35604-0001
	位置天文学特論Ⅱ	Positional Astronomy, Advanced Course II	2	35604-0002
	位置天文学特論Ⅲ	Positional Astronomy, Advanced Course III	2	35604-0003
	位置天文学特論Ⅳ	Positional Astronomy, Advanced Course IV	2	35604-0004
	位置天文学特論Ⅴ	Positional Astronomy, Advanced Course V	2	35604-0005
	天体力学特論Ⅰ	Celestial Mechanics, Advanced Course I	2	35604-0006
	天体力学特論Ⅱ	Celestial Mechanics, Advanced Course II	2	35604-0007
	天体力学特論Ⅲ	Celestial Mechanics, Advanced Course III	2	35604-0008
	天体力学特論Ⅳ	Celestial Mechanics, Advanced Course IV	2	35604-0009
	天体力学特論Ⅴ	Celestial Mechanics, Advanced Course V	2	35604-0010
	光赤外線天文学特論Ⅰ	Optical Infrared Astronomy, Advanced Course I	2	35604-0011
	光赤外線天文学特論Ⅱ	Optical Infrared Astronomy, Advanced Course II	2	35604-0012
	光赤外線天文学特論Ⅲ	Optical Infrared Astronomy, Advanced Course III	2	35604-0013
	光赤外線天文学特論Ⅳ	Optical Infrared Astronomy, Advanced Course IV	2	35604-0014
	光赤外線天文学特論Ⅴ	Optical Infrared Astronomy, Advanced Course V	2	35604-0015
	理論天体物理学特論Ⅰ	Theoretical Astrophysics, Advanced Course I	2	35604-0016
	理論天体物理学特論Ⅱ	Theoretical Astrophysics, Advanced Course II	2	35604-0017
	理論天体物理学特論Ⅲ	Theoretical Astrophysics, Advanced Course III	2	35604-0018
	理論天体物理学特論Ⅳ	Theoretical Astrophysics, Advanced Course IV	2	35604-0019
	理論天体物理学特論Ⅴ	Theoretical Astrophysics, Advanced Course V	2	35604-0020
	太陽物理学特論Ⅰ	Solar Physics, Advanced Course I	2	35604-0021
	太陽物理学特論Ⅱ	Solar Physics, Advanced Course II	2	35604-0022
	太陽物理学特論Ⅲ	Solar Physics, Advanced Course III	2	35604-0023
	太陽物理学特論Ⅳ	Solar Physics, Advanced Course IV	2	35604-0024
	太陽物理学特論Ⅴ	Solar Physics, Advanced Course V	2	35604-0025
	電波天文学特論Ⅰ	Radio Astronomy, Advanced Course I	2	35604-0026
	電波天文学特論Ⅱ	Radio Astronomy, Advanced Course II	2	35604-0027
	電波天文学特論Ⅲ	Radio Astronomy, Advanced Course III	2	35604-0028
	電波天文学特論Ⅳ	Radio Astronomy, Advanced Course IV	2	35604-0029
	電波天文学特論Ⅴ	Radio Astronomy, Advanced Course V	2	35604-0030
	銀河天文学特論Ⅰ	Galactic Astronomy, Advanced Course I	2	35604-0031
	銀河天文学特論Ⅱ	Galactic Astronomy, Advanced Course II	2	35604-0032
	銀河天文学特論Ⅲ	Galactic Astronomy, Advanced Course III	2	35604-0033
	銀河天文学特論Ⅳ	Galactic Astronomy, Advanced Course IV	2	35604-0034
	銀河天文学特論Ⅴ	Galactic Astronomy, Advanced Course V	2	35604-0035
	恒星物理学特論Ⅰ	Stellar Physics, Advanced Course I	2	35604-0036
	恒星物理学特論Ⅱ	Stellar Physics, Advanced Course II	2	35604-0037
	恒星物理学特論Ⅲ	Stellar Physics, Advanced Course III	2	35604-0038
	恒星物理学特論Ⅳ	Stellar Physics, Advanced Course IV	2	35604-0039
	恒星物理学特論Ⅴ	Stellar Physics, Advanced Course V	2	35604-0040
	星間物理学特論Ⅰ	Interstellar Physics, Advanced Course I	2	35604-0041
	星間物理学特論Ⅱ	Interstellar Physics, Advanced Course II	2	35604-0042
	星間物理学特論Ⅲ	Interstellar Physics, Advanced Course III	2	35604-0043
	星間物理学特論Ⅳ	Interstellar Physics, Advanced Course IV	2	35604-0044
	星間物理学特論Ⅴ	Interstellar Physics, Advanced Course V	2	35604-0045
	高エネルギー天文学特論Ⅰ	High Energy Astronomy, Advanced Course I	2	35604-0046
高エネルギー天文学特論Ⅱ	High Energy Astronomy, Advanced Course II	2	35604-0047	
高エネルギー天文学特論Ⅲ	High Energy Astronomy, Advanced Course III	2	35604-0048	
高エネルギー天文学特論Ⅳ	High Energy Astronomy, Advanced Course IV	2	35604-0049	
高エネルギー天文学特論Ⅴ	High Energy Astronomy, Advanced Course V	2	35604-0050	
系外惑星特論Ⅰ	Exoplanets, Advanced Course I	2	35604-0056	
系外惑星特論Ⅱ	Exoplanets, Advanced Course II	2	35604-0057	
系外惑星特論Ⅲ	Exoplanets, Advanced Course III	2	35604-0058	
系外惑星特論Ⅳ	Exoplanets, Advanced Course IV	2	35604-0059	
系外惑星特論Ⅴ	Exoplanets, Advanced Course V	2	35604-0060	

開講所属 Offered by	開講科目名	Course title	単位 Credits	科目番号 Course Code
理学系研究科地球惑星科学専攻 Dept. of Earth and Planetary Science , Graduate School of Science	地球惑星内部物質科学	Material Science of the Earth and Planetary Interiors	2	35616-0009
	惑星大気学	Planetary Aeronomy	2	35616-0012
	比較惑星学基礎論	Elementary Comparative Planetology	2	35616-0014
	地球惑星システム学基礎論	Elementary Earth and Planetary System Science	2	35616-0015
	地球史学	History of the Earth	2	35616-0022
	固体地球科学	Solid Earth Science	2	35616-0023
	宇宙地球化学	Cosmo-and Geo-chemistry	2	35616-0024
	宇宙プラズマ物理学Ⅰ	Space Plasma Physics I	2	35616-1008
	磁気圏物理学Ⅰ	Physics of Magnetosphere I	2	35616-1009
	地球惑星システム学	Earth and Planetary System Science	2	35616-1013
	生命圏環境形成論	Theory of Biospheric Environmental Evolution	2	35616-1040
	生命圏進化学	Evolution of the Biosphere	2	35616-1044
	宇宙プラズマ物理学Ⅱ	Space Plasma Physics II	2	35616-1051
	磁気圏物理学Ⅱ	Physics of Magnetosphere II	2	35616-1052
	地球惑星環境進化学	Theory of Earth and Planetary Environmental Evolution	2	35616-1060
	地球惑星内部進化学	Theory of Earth and Planetary Evolution	2	35616-1061
	地球内部ダイナミクス	Dynamics of Earth's Interior	2	35616-1071
	惑星系形成論	Theory of Planetary System Formation	2	35616-1072
	惑星探査学Ⅰ	Planetary Exploration Science I	2	35616-2013
	惑星探査学Ⅱ	Planetary Exploration Science II	2	35616-2014
	比較惑星学Ⅰ	Comparative Planetology I	2	35616-2015
	比較惑星学Ⅱ	Comparative Planetology II	2	35616-2016
	宇宙惑星物質科学Ⅰ	Cosmic and Planetary Material Science I	2	35616-2017
	宇宙惑星物質科学Ⅱ	Cosmic and Planetary Material Science II	2	35616-2018
	並列計算プログラミング	Programing for Parallel Computing	2	35616-2057
	先端計算機演習	Seminar on Advanced Computing	1	35616-4009
	科学英語演習Ⅲ (地球惑星科学)	English for Scientific Researchers	2	35616-4014
	理学系研究科共通 Graduate School of Science (Common Course)	現代科学・コミュニケーション論	Theory of Science Communication	2
現代科学史概論Ⅰ		Introduction to Modern History of Science I	2	35620-4001
現代科学史概論Ⅱ		Introduction to Modern History of Science II	2	35620-4002
現代科学史概論Ⅲ		Introduction to Modern History of Science III	2	35620-4003
工学系研究科航空宇宙工学専攻 Dept. of Aeronautics and Astronautics, Graduate School of Engineering	宇宙機設計特論	Special Lectures on Spacecraft Design	2	3734-053
新領域創成科学研究科先端エネルギー工学専攻 Dept. of Advanced Energy, Graduate School of Frontier Sciences	深宇宙探査学入門	Introduction to Deep Space Exploration	2	47110-43
新領域創成科学研究科複雑理工学専攻 Dept. of Complexity Science and Engineering, Graduate School of Frontier Sciences	実践深宇宙探査学	Practical Applications for Deep Space Exploration	2	47130-49

※自身の所属専攻以外で開講される科目を、少なくとも2単位は修得すること。

At least two credits must be obtained for courses given by a department other than their own.

※開講所属が「理学系研究科共通」の科目については、理学系研究科の学生は「自専攻科目」、工学系研究科・新領域創成科学研究科の学生は「他専攻科目」として取り扱う。

Common courses offered by the Graduate School of Science are counted as courses from their own department for students in the Graduate School of Science whereas they are counted as courses given by a department other than their own for students in the Graduate School of Engineering and the Graduate School of Frontier Sciences.

※年度によって開講されない科目がある場合があります。

Some courses may not be offered depending on the academic year.