香港浸会大学物理系
3+2 本硕连读课程 学生选修课程要求

每所合作院校都会要求其参与 3+2 本硕连读课程的学生于香港浸会大学第一年学习期间修读指定的课程,以用作学分转移。一般而言，修读组合可分为以下四大类：

1. **专业必修课(Major Core)：** 物理科主修课程。
2. **毕业论文(Graduation Project)：** 学生需在香港浸会大学物理系导师指导下完成项目研究，用英文写作论文并用英文进行口头答辩。
3. **专业选修课(Major Elective)：** 物理科选修课程。
4. **一般选修课(Free Elective)：** 香港浸会大学其他学系提供的课程，如语言、资讯科技、文化研究等(部份课程需先得到课程导师批准方可修读)。

一般而言,学生需从上述课程中合共修读一定的学分,方可达到所属院校的要求。学生请点选所属院校之连结,以查询需选修香港浸会大学的课程组合及学分要求#:

- 南通大学理学院
- 太原理工大学 物理与光电工程学院/材料科学与工程学院

注：

香港浸会大学对学生选修之课程并无特别限制(部份需导师批准之课程除外)，但一般要求学生每学期需选修 **12-18 学分**。

南通大学理学院

(last update: Sept 2024)

1. 要求学生至少从下表第一及第二类课程中合共修读 **12**学分。
2. 课程组合及学分分布：

Type	Course Code	Unit	Semester
1	**Major Cores/Major Electives (6 units)**		
	GEST3005 Smart Sensors and IoT	4	1st/2nd
	GEST3006 Digital Technology for Network Communication	3	1st/2nd
	GEST3007 Sustainable Transportation Technology	3	1st/2nd
	GEST3015 Smart Materials: Structures and Properties	3	1st/2nd
	GEST4005 Carbon Audit and Energy Audit	4	1st/2nd
	GEST4006 Energy Management of Green Building	3	1st/2nd
	GEST3025 Guided Study in Energy Science II	3	1st/2nd
	GEST3026 Networks, Complexity and their Applications	3	1st/2nd
	GEST3016 Machine Learning: from Data to Model	3	1st/2nd
	GEST3017 Green Energy Lab with Smart Devices	3	1st/2nd
	GEST4007 Advanced Green Energy Laboratory	3	1st/2nd
	GEST4015 Advances in Displays and Lighting	3	1st/2nd
	GEST4016 Topics in Green Energy and Smart Technology I	3	1st/2nd
	GEST4017 Topics in Green Energy and Smart Technology II	3	1st/2nd
	GEST4025 Topics in Green Energy and Smart Technology III	3	1st/2nd
	GEST4027 Introduction to Robotics	3	1st/2nd
	SCIP4005 Interdisciplinary Topics in Sci.: Flexible Electronics	3	1st/2nd
	CHEM4006 Environmental Chemistry and	3	1st/2nd

Type	Course Code	Unit	Semester
	Pollution Control		
	GEOG3007 Energy Problems and the Environment	3	1st/2nd
	GEOG4016 Sustainable Energy and Technological Innovation in China	3	1st/2nd
	GEOG4065 Energy Policy and Analysis	3	1st/2nd
	CAP3035 GE Capstone Interdisciplinary Independent Study (PHYS)	3	1st/2nd
	GCAP3036 Innovate for World Solutions	3	1st/2nd
2	**Graduation Project (6 units)**		
	GEST4898 Final Year Project I	3	1st
	GEST4899 Final Year Project II	3	2nd
3	**Free Electives**		
	Course List	--	1st/2nd

太原理工大学 物理与光电工程学院/材料科学与工程学院

(last update: Oct 2025)

1. 要求学生至少从下表课程中合共修读 **32**学分。
2. 课程组合及学分分布：

Type	Course Code	Unit	Semester
1	**Major Cores (20 units)**		
	GEST3005 Smart Sensors and IoT	4	1st/2nd
	GEST3006 Digital Technology for Network Communication	3	1st/2nd
	GEST3007 Sustainable Transportation Technology	3	1st/2nd
	GEST3015 Smart Materials: Structures and Properties	3	1st/2nd
	GEST4005 Carbon Audit and Energy Audit	4	1st/2nd
	GEST4006 Energy Management of Green Building	3	1st/2nd
2	**Major Electives/Free Electives (6 units)**		
	GEST3016 Machine Learning: from Data to Model	3	1st/2nd
	GEST3017 Green Energy Lab with Smart Devices	3	1st/2nd
	GEST3025 Guided Study in Energy Science II	3	1st/2nd
	GEST3026 Networks, Complexity and their Applications	3	1st/2nd
	GEST3027 Principles of AI: from Model to Applications	3	1st/2nd
	GEST4007 Advanced Green Energy Laboratory	3	1st/2nd
	GEST4015 Advances in Displays and Lighting	3	1st/2nd
	GEST4016 Topics in Green Energy and Smart Technology I	3	1st/2nd
	GEST4017 Topics in Green Energy and Smart Technology II	3	1st/2nd
	GEST4025 Topics in Green Energy and Smart Technology III	3	1st/2nd
	GEST4027 Introduction to Robotics	3	1st/2nd
	GEST4035 Fundamentals of Microelectronics and	3	1st/2nd

Type	Course Code	Unit	Semester
	Artificial Intelligence Hardware		
	SCIP4005 Interdisciplinary Topics in Sci.: Flexible Electronics	3	1st/2nd
	CHEM4006 Environmental Chemistry and Pollution Control	3	1st/2nd
	GEOG3007 Energy Problems and the Environment	3	1st/2nd
	GEOG4016 Sustainable Energy and Technological Innovation in China	3	1st/2nd
	GEOG4065 Energy Policy and Analysis	3	1st/2nd
	CAP3035 GE Capstone Interdisciplinary Independent Study (PHYS)	3	1st/2nd
	Course List of Free electives	--	1st/2nd
3	**Graduation Project (6 units)**		
	GEST4898 Final Year Project I	3	1st
	GEST4899 Final Year Project II	3	2nd