南方科技大学
SOUTHERN UNIVERSITY OF SCIENCE AND TECHNOLOGY

课程详述
COURSE SPECIFICATION

以下课程信息可能根据实际授课需要或在课程检讨之后产生变动。如对课程有任何疑问，请联系授课教师。

The course information as follows may be subject to change, either during the session because of unforeseen circumstances, or following review of the course at the end of the session. Queries about the course should be directed to the course instructor.

1.	课程名称 Course Title	元宇宙时代的电子信息科学技术 Electronic and Information Technology for Metaverse
2.	授课院系 Originating Department	电子与电气工程系 The Department of Electrical and Electronic Engineering
3.	课程编号 Course Code	EE101
4.	课程学分 Credit Value	1
5.	课程类别 Course Type	通识选修课程 General Education (GE) Elective Courses （请保留相应选项 Please only keep the relevant information）
6.	授课学期 Semester	春季 Spring /秋季 Fall
7.	授课语言 Teaching Language	中英双语 English & Chinese （请保留相应选项 Please only keep the relevant information）
8.	授课教师、所属学系、联系方式（如属团队授课，请列明其他授课教师） Instructor(s), Affiliation& Contact （For team teaching, please list all instructors）	授课教师：于明 YU MING （春季） 所属学系：电子与电气工程系 联系方式：yum@sustech.edu.cn 授课教师：孟庆虎（秋季） 所属学系：电子与电气工程系 联系方式：mengqh@sustech.edu.cn；
9.	实验员/助教、所属学系、联系方式 Tutor/TA(s), Contact	待公布 To be announced （请保留相应选项 Please only keep the relevant information）
10.	选课人数限额(可不填) Maximum Enrolment（Optional）	

11. 授课方式 Delivery Method	讲授 Lectures	习题/辅导/讨论 Tutorials	实验/实习 Lab/Practical	其它(请具体注明) Other（Please specify）	总学时 Total
学时数 Credit Hours	16				16

12. 先修课程、其它学习要求 Pre-requisites or Other Academic Requirements	无 NA
13. 后续课程、其它学习规划 Courses for which this course is a pre-requisite	本课程将作为电子系各专业 2022 级培养方案中“2+2”进入专业前应修读完成的先修课
14. 其它要求修读本课程的学系 Cross-listing Dept.	无 NA

教学大纲及教学日历 SYLLABUS

15. 教学目标 Course Objectives

《元宇宙时代的电子信息科学技术》是针对大一学生展开的电子信息领域认知教育的重要课程，该课程将作为电子系各专业 2022 级培养方案中“2+2”进入专业前应修读完成的先修课。

课程将为学生介绍电子信息发展历史与未来进入元宇宙时代的发展趋势，培养其电子信息专业兴趣，引领其步入电子信息领域，帮助了解电子信息科学技术领域所涉及的基本思想、核心技术、专业范围和毕业后可能从事的工作，为学生的专业发展提供认知和心理上的准备；同时激发学生的内在自觉性，帮助他们尽早实现从中学过渡到大学生活，学会主动寻求教育资源，在探索中认识自我、认识社会，找到属于自己的成长道路。

Electronic and Information Technology for Metaverse is an essential course in the cognitive education of electronic information (EI) for first-year students, and it shall become a pre-requisite course for future 2+2 program. The course will guide students into the EI field by introducing them to the history and future development trends of EI in metaverse, cultivating their interests, helping them understand the basic ideas, core technologies, professional development and possible jobs after graduation, and preparing them cognitively and psychologically for their professional development; at the same time, it will stimulate students' self-consciousness and help them successfully adjust to university life, learn to actively seek educational resources, explore themselves and the society, and eventually discover their own unique path of growth.

16. 预达学习成果 Learning Outcomes

1. 全面了解和掌握电子信息的基本内容 Get an overall command of the basic ideas of electronic information technology in metaverse

2. 理解电子信息核心技术和了解未来可能的职业发展 Understand the core technologies and possible professional development

3. 培养学生对电子信息的兴趣 Cultivate interests in electronic information

4. 促进学生培养良好的自我认知 Facilitate good cognition of self-consciousness

5. 培养学生优秀的自驱学习能力 Develop self-driven learning ability

17. 课程内容及教学日历 （如授课语言以英文为主，则课程内容介绍可以用英文；如团队教学或模块教学，教学日历须注明主讲人）
Course Contents (in Parts/Chapters/Sections/Weeks. Please notify name of instructor for course section(s), if this is a team teaching or module course.)

Session 1 Introduction of Electronic Information Technology in Metaverse

Session 2 Electronic Information and Robotics 1

Session 3 Electronic Information and Robotics 2

Session 4 Electronic Information and Control Engineering

Session 5 Photonics – The Information Super Highway

Session 6 Electronic Information Introduction

Session 7 Electronic Information and Communication

Session 8 Electronic Information and IoT

18. 教材及其它参考资料 Textbook and Supplementary Readings

参考材料：Gleick J. The information: A history, a theory, a flood. Vintage; 2011 Mar 1.

课程评估 ASSESSMENT

19.

评估形式 Type of Assessment	评估时间 Time	占考试总成绩百分比 % of final score	违纪处罚 Penalty	备注 Notes
出勤 Attendance		20%		
课堂表现 Class Performance		20%		
小测验 Quiz		30%		
课程项目 Projects				
平时作业 Assignments				
期中考试 Mid-Term Test				
期末考试 Final Exam				
期末报告 Final Presentation		30%		
其它（可根据需要改写以上评估方式） Others (The above may be modified as necessary)				

20. 记分方式 grading system

☑ A. 十三级等级制 **Letter Grading**
☐ B. 二级记分制（通过/不通过） **Pass/Fail Grading**

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课程审批 REVIEW AND APPROVAL

21. **本课程设置已经过以下责任人/委员会审议通过**
This Course has been approved by the following person or committee of authority
