西安交通大學

XI'AN JIAOTONG UNIVERSITY

Graduate Program for International Students

Graduate School

2020.07

前沿科学技术研究院

Frontier Institute of Science and Technology

材料及物理类、生物类国际研究生培养方案

International Graduate Programs in Materials and Physics Fields/ Biomedical Field

（一）材料及物理类博士研究生培养方案（适用于多学科材料研究中心、材料物理中心、微观组织科学中心的博士研究生，或根据导师要求使用）

Doctoral programs in materials and physics fields are applicable for doctoral students in Multi-disciplinary Materials Research Center (MMRC), Materials Physics Center (MPC), and the Center for Microstructure Science (CMS), etc.

一、培养目标（Program objectives）

培养适应国民经济发展和社会主义建设需要的、具有国际视野的创新型人才，提高研究生的自主学习能力和创新实践能力，具体要达到以下要求：

The programs aim to cultivate innovative talents that have international vision, serve the needs of economic development and construction, and to improve their independent learning ability and innovative practice ability. The following are specific requirements:

1．热爱祖国，遵纪守法，道德品质好，愿为科研事业奉献、服务。

Students should love their motherland，obey laws, have good moral qualities，and engage in scientific research.

2．在材料物理领域掌握坚实宽广的基础理论和系统深入的专门知识；在所从事的研究方向上做出创造性成果。

Students are expected to know solid knowledge, broad basic theories and have systematic in-depth specialized knowledge in the field of materials physic, and obtain innovative results in the research area undertaken.

3．具有独立从事科学研究工作的能力；具有实事求是，科学严谨的治学态度和工作作风。

Students have the ability to work independently in scientific research and have a down-to-earth work style and rigorous academic attitude.

4．能够熟练地阅读本领域的外文资料，并具有一定的听说和写作。

Students are proficient in reading literature in masterials physics in a foreign language and are able to listen and speak in that foreign language.

二、研究方向（Research fields）

1．记忆材料、压电材料、磁致伸缩材料等各种智能材料及其物理、化学、力学性能研究；致力于能够带来超高性能或全新性能的普遍性新原理的发现以及由此设计和开发高性能新型智能材料。

Research on intelligent materials, such as shape memory polymer, piezoelectric ceramics, magnetostrictive metals and their physical, chemical, and mechanical properties; discovering general new mechanism that can lead to ultra-high and new performance of materials, from which new intelligent materials can be designed and developed.

2．先进结构材料与铁性功能材料相变过程微观组织演化、高温和应力作用下微观组织与位错的交互作用，力-电和电-磁耦合多铁材料，集成计算材料科学与工程。

Understanding the interaction between microstructure and dislocation during phase transformation of structural and ferrous functional materials; studying the relationship between microstructure and dislocation under high temperature and stress; studying the force-electric and electric-magnetic coupling of multi-ferric materials.

3．计算材料学以及纳米材料研究、材料模拟基础方法（电子结构、原子层次模拟）、多尺度多物理模拟、以及新型功能材料的研究与开发。

Research on computational materials science and nanomaterial, basic methods for material simulation (electronic structure simulation, atomic level simulation), multi-scale and multi-physics simulation, and research and development of new functional materials.

三、学习年限（Length of programs）

国际博士研究生学习年限一般为 3-5 年，经批准可适当延长，延长时间不超过 1 年。

The general of doctoral programs is 3 to 5 years. Prolongation (no more than one year) needs approving by the university.

四、课程学习(Course work)

学术学位博士生课程学习应至少取得 12 学分，包括：公共课（汉语（Ⅱ）2 学分、中国概况（Ⅱ）2 学分）4 学分，专业学位课至少 4 学分，选修课至少 4 学分。

The academic doctoral programs require at least 12 credits for course work. Required courses include *Comprehensive Chinese Ⅱ* (2 credits), *Outline of China Ⅱ* (2 credits), degree courses (no less than 4 credits), and elective courses (no less than 4 credits).

必修环节包括：学术活动（讲座）2 学分、开题报告 2 学分、中期考核 6 学分。

Other compulsory activities include academic lectures (doctoral) (2 credits), dissertation proposal (2 credits), and mid-term assessment (6 credits).

材料及物理类国际博士研究生课程设置和学分要求

Curriculum and Credits Requirements of Doctoral Programs in Materials and Physics

课程类型 Course Type	序号 No.	课程编号 Course number	统一编码 Course Code	课程名称* Course Title	学分 Credit	备注 Notes
公共学位课 Public Course	1	272003	LITE610112	中国概况（Outline of China）	2	必修 4 学分 4 credits required
	2	272004	LITE610227	综合汉语（Comprehensive Chinese）	2	
专业学位课 Degree Course	1	022038	MATL750302	固态相变（Phase Transitions in Solid）	2	至少修 4 学分 A minimum of 4 credits required
	2	022050	MATL740202	Frontiers of Materials Science	2	
	3	023001	MATL712902	材料物理性能（Physical Properties of Materials）	2	
	4	022021	MATL711302	智能材料（Smart Materials）	2	
	5	052191	EELC612005	Principles Of Electronic Materials And Devices	2	
选修课 ElectiveCourse	1	052190	EELC611905	Electronic thin films and applications	2	至少修 4 学分 A minimum of 4 credits required
	2	022052	MATL740402	Electron Microscopy and its Application in Materials Science	2	
	3	022053	MATL740502	Advanced Energy Materials	2	
	4	042109	ELEC714504	科技论文写作（Scientific Writing）	1	

课程类型 Course Type	序号 No.	课程编号 Course number	统一编码 Course Code	课程名称* Course Title	学分 Credit	备注 Notes
	5	052177	EELC713605	Introduction To Electron Microscopy	2	
	6	283002	BIME840128	骨组织修复与再生材料 (Biomaterials for Bone Repair and Regeneration)	2	
	7	283001	MATL640128	磁学导论与磁性材料 (Magnetism Fundamentals and Magnetic Materials)	2	
	8	152078	BASM611815	诺贝尔奖论文剖析 (The Analysis of the Articles Acquired Nobel Prize)	2	
	9	152049	PUBH610615	数据管理与分析 (Management and Analysis of Data)	2	
				Elective courses under your advisors' suggestion		
必修环节 Compulsory Activities	1	001999	BXHJ800399	学术活动(讲座)（博） (Lectures)(Doctoral)	2	必修 10 学分 10 credits required
	2	001986	BXHJ800499	开题报告 （Dissertation Proposal）	2	
	3	001994	BXHJ800199	中期考核 (Mid-term Assessment)	6	

*有些英文课程没有中文名称，以课程编号为准。

For courses without Chinese titles, check the course code when selecting courses.

五、培养环节（Compulsory Activities）

1．学术活动（讲座）（Lectures）

国际博士研究生学术活动（讲座）分为必听讲座和选听讲座。必听讲座为“科学道德与学风建设”；选听讲座包括与学科紧密相关的“学科前沿系列专题讲座”（由各二级学科组织若干教授对本学科前沿知识进行讲座，每个专题讲座由 5 个以上讲座组成）一个系列和在全校范围内选听“学术

讲座”1 次，自己公开讲座 1 次，完成后记 2 学分。新港报告纳入国际留学生选修课，学生听够 20 场讲座后可记 2 学分。

Doctoral students are required to attend 7 lectures, including: a compulsory one on scientific morality, 5 lectures in a series regarding discipline-specific frontiers information (organized by respective individual school), and 1 elective lecture. In addition, doctoral candidates are required to give a lecture by students themselves. Students will obtain 2 credits by completing the whole series of activities. Innovation Harbour Lectures are included in elective courses for international students, 2 credits will be granted after attending 20 Lectures.

2．开题报告（Dissertation Proposal）

博士研究生一般在第三学期组织开题，需提交选题报告，并参与答辩报告会。选题报告使用英文填写《博士研究生学位论文选题报告》，主要内容包括：选题的科学依据、主要研究内容和方案、研究计划及预期进展。准备英文版 PPT，用英文答辩、问答，每位同学个人陈述 15-20 分钟，评审专家提问环节 5-10 分钟。评审专家组一般至少由 4 位以上教师组成。评审专家根据研究生选题报告以及现场答辩情况给出评审结果。通过后记 2 学分。

Doctoral students should complete dissertation proposal reporting in the third semester, deciding on the topic of doctoral dissertation. The dissertation should be completed in English. The main contents include the scientific basis for the topic chosen, , the main contents, research plans and expected results. Students are required to present the proposal in PPT slides and deliver in English in 15-20 minutes, and question-answer session will last 5-10 minutes. The reviewer panel is made up of at least four or more professors. Students will obtain 2 credits by completing the whole series of activities.

3．中期考核（Mid-term Assessment）

中期考核一般在第四学期完成，需提交《中期进展报告》、成绩单，并参加答辩报告会。中期报告使用英文填写《中期进展报告》，经导师签字确认。准备英文版 PPT，用英文答辩、问答，每位同学个人陈述 15-20 分钟，评审专家提问环节 5-10 分钟。评审专家小组应由至少 5-7 名本学科或相关学科博士生指导教师组成。专家依据博士研究生的论文课题进展情况进行考核，必要时可参阅其课程学习和选题报告情况进行综合评议，并给出考核结果。

The mid-term assessment is generally completed in the fourth semester. It is required that students submit the “Med-term Progress Report” and transcripts. The report is completed in English and signed by the tutor. Students will deliver the depart in PPT slides and speak in English for 15-20 minutes and question-answer session will be in English and will last for 5-10 minutes. The reviewer panel is made up of at least 5-7 doctoral supervisors of the discipline undertaken and the related disciplines.

博士生中期考核实行分流机制，考核结果纳入学生成绩管理，中期考核合格者将获得相应学分。在本次考核中，中期考核不合格者将被确定为初步分流对象；凡培养计划中任何一门课程不及格，或未完成之前的选题报告，或未经学院批准无故不参加中期考核者将被直接认定为初步分流对象。被认定为初步分流对象的博士研究生仍可申请参加在随后一学期的补考核（具体时间由学院确定）。凡在补考核中，仍未通过者，均视为补考核不通过，并将被认定为最终分流对象。

博士中期考核合格后记 6 学分。

The doctoral student's mid-term assessment is important. Those who pass the mid-term assessment

will obtain 6 credits. Those who fail in the mid-term assessment will have a second chance. And if they still fail another time, they will be terminated from their doctoral program. Candidates who fail in any course work, or who hasn't completed completing dissertation proposal or who was absent from mid-term assessment without approval will be the students to be terminated from their program if they fail again in the second chance given.

4．预答辩（Pre-oral dissertation defense reporting）

研究生完成学位论文及培养计划规定的内容后，在规定的时间提交学位申请书、学位论文、学习成绩单以及在学期间发表的学术论文和取得的研究成果证明，在指导教师审查同意后组织预答辩。

After the completion of the dissertation, students are required to take part in the pre-oral dissertation defense reporting meeting. Before the meeting, , the doctoral candidates are to submit the degree application, dissertation, academic transcript, journal articles and the proof of research results to the office managing the graduate affairs.

5．学位论文（Dissertation）

对博士研究生，学位论文应在指导老师指导下由研究生本人独立完成，如果实际科研中存在多位指导老师，在学位论文上应同时署名多位导师。论文应在科学或专门技术上做出创造性成果，并在理论上或实际上，对社会主义建设有较大的意义；用于博士学位论文的工作时间一般应有 2 个学年左右。

The dissertation should be completed independently by the graduate candidates under the guidance of their supervisor. If there are two or more supervisors for a candidate, all of them will sign their names on the copyright page and innovation announcement page of the dissertation. The dissertation research should demonstrate the research has brought about innovative findings in science or technology, and the results are significant in theory or practice to the development of the country. The working time for doctoral dissertations research generally is about 2 academic years.

学位论文内容一般应包括：独创性声明、保护知识产权声明、中英文摘要、目录、引言、正文（理论分析；实验装置和测试方法；对实验结果的分析、讨论与理论计算结果的比较）、结论、致谢、参考文献、攻读博士学位期间的研究成果及附录等。博士学位论文 5 万字左右。文字要语句精练通顺，条理分明，文字、图表清晰整齐。

The structure of the dissertation generally includes the following sections: statement of originality, statement of protection of intellectual property rights, abstract, contents page, introduction, body of the text (theoretical analysis; experimental setup and methods; analysis of experimental results, comparison of discussion and theoretical results), conclusion, acknowledgments, references, research results during the PhD study and appendices. The doctoral dissertation is about 50,000 words long. The dissertation must be read smooth, longical, and the graphs and characters must be clear in print.

六、培养环节时间节点(Timeline and milestones）

博士 Doctoral program	课程学习 Course Work	开题报告 Dissertation Proposal	中期考核 Mid-term Assessment	预答辩 Pre-oral dissertation defense reporting	论文答辩 Oral Dissertation Defense
时间点 Timeline	第一年 First Year	第三学期 Third Semester	第四学期 Fourth Semester	对应学位会指定日期之前 Before the designated date of the corresponding degree committee meeting	对应学位会指定日期之前 Before the designated date of the corresponding degree committee meeting
具体要求 Specific requirements	完成课程设置要求的所有内容 Complete all the course work	提交选题报告、通过答辩 Submit dissertation proposal and report it in a meeting to pass it	提交中期考核报告、通过答辩 Submit the mid-term assessment report and pass the oral defense	完成通过所有课程、必修环节考核，满足所在中心毕业要求，完成博士学位论文初稿并通过学术不端检测 Complete all course work compulsory activities, fulfill other graduation requirements, complete doctoral dissertation and pass the academic misconduct test	完成预答辩，通过送审，经过答辩审批 Complete the pre-oral defense reporting, pass the dissertation reviewing, and pass the oral dissertation defense

（二）生物类博士研究生培养方案（适用于生物工程与再生医学研究中心、转化医学研究中心、线粒体生物医学中心、神经和疾病研究中心和骨骼关节疾病与治疗研究中心的普通博士研究生）

Doctoral programs in biomedical field, applicable to doctoral students in Center for Biomedical Engineering and Regenerative Medicine (CBERM), Center for Translational Medicine(CTM), Center for Mitochondrial Biology and Medicine (CMBM), Center for Neuron and Disease(CND), Bone and Joints Research Center(BJRC) .

一、培养目标（Program objectives）

为满足社会的需求，以培养为科研、教学和高技术产业服务的德、智、体全面发展的生物医学领域人才为目标，具体要求为：

The programs aim to cultivate talents in morality, intelligence and physique, intellectual and physical development who serve the scientific research/teaching/high-tech industries. The detailed contents are as below:

1．热爱祖国，遵纪守法，积极为国家和社会发展服务。

Students love the motherland, respect the law, and positively serve the development of the country and the society.

2．在生物医学领域掌握坚实宽广的基础理论和系统深入的专门知识；在所从事的研究方向上做出创造性成果。

Students have mastered solidly and broadly basic theories, and systematic detailed specialized acknowledge in biomedical field, and have made innovative achievements in the area of research.

3．具有独立从事科学研究工作的能力；具有实事求是，科学严谨的治学态度和工作作风。

Students have developed the ability to work independently in scientific research and a down-to-earth work style and rigorous academic attitude.

4．掌握一门外语，熟练的进行书面和口头交流，阅读外文资料。

Students have mastered a foreign language, and can communicate skillfully in written and oral and read literature in that foreign language..

二、研究方向（Research fields）

1. 以干细胞生物工程与再生医学为研究目标，研发先进的新型生物医用材料，生物分子和药物的控制释放技术，诱导干细胞的分化，用动物模型试验结合基础研究来探索生物材料组织再生的机制。主要研究方向包括：先进的新型可降解生物材料合成与应用；生物分子和药物的控制释放技术；生物材料与组织工程。

The research activities include the following: stem cell bioengineering and regenerative medicine, advanced new biomedical materials and controlled release technology for biomolecules and drugs to induce stem cell differentiation, ands the mechanism of biomaterials for tissue regeneration based on basic research in animal model experiments. The main areas of research include the following: the fabrication and application of advanced biodegradable biomaterials; the controlled release technology of biomolecules and drugs; biomaterials for tissue engineering.

2. 致力于具有广泛临床应用前景的多学科基础生物医学研究，涉及学科包括多肽与蛋白质化学、结构生物学、肿瘤生物学、微生物学、免疫学、纳米药学等。通过多学科交叉研究肿瘤、感染性疾病和免疫性疾病的发病机制；设计开发抗肿瘤和抗感染的多肽类药物以及它们的递送手段。

Multidisciplinary basic biomedical research with a wide range of clinical applications, including peptide and protein chemistry, structural biology, tumor biology, microbiology, immunology, nano-pharmaceutical and so on; the pathogenesis of tumors, infectious diseases and immune diseases based on multidisciplinary studies; Designing and developing the anti-tumor and anti-infective peptide drugs and their delivery strategies.

3. 以线粒体代谢为研究重点，致力于探讨衰老及衰老相关疾病在分子细胞生物学水平上的调控机制，开发靶向于调控线粒体代谢的营养素和药物，从而有效预防和治疗各种疾病的发生发展。

With mitochondrial metabolism as key of studies,, exploring the regulation mechanism of ageing and ageing-related diseases at the level of molecular and cellular biology, and developing nutrients and drugs that target the regulation of mitochondrial metabolism

4. 致力于神经和相关疾病的基础研究，建立研究人类疾病的动物模型。主要探索认知以及脑疾病中的分子机制、寻找新的信号分子蛋白、研究其生理机制以及在发育过程和病理状态下的功能变化、明确信号分子在认知过程和脑疾病发生和发展过程中的地位和作用。

Basic research on nerves and related diseases and establishment of animal models for treating human diseases; the molecular mechanisms in cognition and brain diseases, new signaling molecules, their physiological mechanisms, and functions in the developmental and pathological states; and the status and role of signaling molecules in in cognitive processes and the development and progression of brain diseases.

5. 致力于骨、软骨、肌肉和其它关节软组织发育和衰老的基础研究，建立研究人类骨骼肌肉关节疾病的动物模型，发展诊断和治疗相关疾病的纳米医学和组织工程学，包括：細胞外基质，软骨和骨组织工程，软骨和骨的机械调控，骨关节炎、骨质疏松和其它关节退行性疾病的机制研究、创伤、糖尿病、衰老、绝经以及各种免疫及代谢性疾病引起的骨质疏松和骨关节炎，骨骼的免疫调控及骨骼细胞内信号转导、急性和慢性感染及炎症对于骨骼的影响、骨髓及间充质干细胞的增值分化和对骨、软骨、肌肉细胞分化代谢的调控、骨折和骨折愈合、研发天然药物和传递以预防诊断和治疗骨质疏松，骨关节炎，以及其它骨骼肌肉关节疾病。

The fundamental research of the development and ageing of bone, cartilage, muscle and other joint soft tissues, establishment of animal models for the study of human skeletal muscle and joint diseases, the development of nanomedicine and tissue engineering for the diagnosis and treatment of related diseases, including: extracellular matrix, tissue engineering of cartilage and bone, mechanical regulation of cartilage and bone, mechanisms of osteoarthritis, osteoporosis and other joint degenerative diseases, osteoporosis and osteoarthritis caused by trauma, diabetes, aging, menopause, and various immune and metabolic diseases, immune regulation of bones and signal transduction in bone cells, effects of acute and chronic infections and inflammation on bones, proliferation and differentiation of bone marrow and mesenchymal stem cells and regulation of differentiation and metabolism of bone, cartilage and muscle cells, fracture and fracture healing, development of natural medicines and transmission to prevent diagnosis and treatment of osteoporosis, osteoarthritis, and other musculoskeletal joint diseases.

三、学习年限（Length of program）

国际博士研究生学习年限一般为 3-5 年，经批准可适当延长，延长时间不超过 1 年。

The length of doctoral programs is 3 to 5 years. Prolongation (no more than one year) has to be approved by the university.

四、课程学习(Course work)

学术学位博士生课程学习应至少取得 12 学分，包括：公共课（汉语（Ⅱ）2 学分、中国概况（Ⅱ）2 学分）4 学分，专业学位课至少 4 学分，选修课至少 4 学分。

The academic doctoral programs require at least 12 credits for course work. Required courses include *Comprehensive Chinese Ⅱ* (2 credits), *Outline of China Ⅱ* (2 credits), degree courses (no less than 4 credits), and elective courses (no less than 4 credits).

必修环节包括：学术活动（讲座）2 学分、开题报告 2 学分、中期考核 6 学分。

Other compulsory activities include academic lectures (doctoral) (2 credits), dissertation proposal (2 credits), and mid-term assessment (6 credits).

生物医学类国际博士研究生课程设置和学分要求

Curriculum Design and Credit Requirements of Doctoral Programs in Biomedical field

课程类型 Course Type	序号 No.	课程编码 Course number	统一编码 Course Code	课程名称 Course Title	学分 Credit	备注 Notes
公共学位课 Public Course	1	272003	LITE610112	中国概况（Outline of China	2	必修 4 学分 4 credits required
	2	272004	LITE610227	综合汉语（Comprehensive Chinese）	2	
专业学位课 Degree Course	1	132067	BIOL610113	高等分子细胞生物学 (Advanced Molecular Biology of Cell)	2	至少修 4 学分 A minimum of 4 credits required
	2	152025	BASM611415	组织化学与免疫组织化学 (Histochemistry and Immunohistochemistry)	2	
	3	152197	BIOL611115	医学分子生物学 (Medical Molecular Biolgy)	2	
	4	012211	MACH741101	先进医疗器械设计方法 (Design Methodology of Advanced Medical Devices)	2	
	5	022050	MATL740202	材料科学前沿 (Frontiers of Materials Science)	2	
	6	133006	BIOL640213	Mitochondrial Biology and Medicine	2	
选修课 Elective Course	1	013705	MACH741001	电活性功能材料与结构导论特性与应用 (Electroactive Polymer Materials and Structures Properties and Applications)	2	至少修 4 学分 A minimum of 4 credits required
	2	022021	MATL711302	智能材料 (Smart Materials)	2	
	3	022052	MATL740402	电子显微镜在材料科学中的应用 (Electron Microscopy and its Application in Materials Science)	2	

课程类型 Course Type	序号 No.	课程编码 Course number	统一编码 Course Code	课程名称 Course Title	学分 Credit	备注 Notes
	4	042109	ELEC714504	科技论文写作 (Scientific Writing)	2	
	5	152017	BASM610815	现代生物技术 (Modern Biotechnology)	2	
	6	152049	PUBH610615	数据管理与分析 (Management and Analysis of Data)	2	
	7	152075	BASM611715	医学科学研究导论（Introduction of the Research in Medical Science）	2	
	8	152073	BASM611615	动物实验与实验动物学 (Animal Experiment and Laboratory Animal Science)	2	
	9	283002	BIME840128	骨组织修复与再生材料 (Biomaterials for Bone Tissue Repair and Regeneration)	2	
	10	152078	BASM611815	诺贝尔奖论文剖析 (The analysis of the articles acquired Nobel Prize)	2	
必修环节 Compulsory Activities	1	001999	BXHJ800399	学术活动(讲座)（博） (Lectures)(Doctor)	2	必修 10 学分 10 credits required
	2	001986	BXHJ800499	开题报告（Dissertation Proposal	2	
	3	001994	BXHJ800199	中期考核 Mid-term Assessment	6	

五、培养环节（Compulsory Activities）

1．学术活动（讲座）（Lectures）

国际博士研究生学术活动（讲座）分为必听讲座和选听讲座。必听讲座为“科学道德与学风建设”；选听讲座包括与学科紧密相关的“学科前沿系列专题讲座”（每个专题讲座由 5 个以上本学科

讲座组成）一个系列和在全校范围内选听“学术讲座”1 次，自己公开讲座 1 次，完成后记 2 学分。新港报告纳入国际留学生选修课，学生听够 20 场讲座后可记 2 学分。

The lectures for international doctoral students include compulsory lectures and elective lectures. The compulsory lectures are composed of the lectures about scientific ethics and academic atmosphere construction. The elective lectures consists of discipline-related series of lectures about frontier development (5 lectures in a series regarding discipline-related lectures organized by respective individual schools), and 1 elective lecture in the university. In addition, they are also required to give an open lecture. With all the lectures described above attended, students can get 2 credits for the lectures required. Innovation Harbour Lectures are included in elective courses for international students, 2 credits will be granted after attending 20 Lectures.

2．开题报告（Dissertation Proposal）

博士研究生一般在第三学期组织开题，需提交选题报告，并参与答辩报告会。选题报告使用英文填写《博士研究生学位论文选题报告》，主要内容包括：选题的科学依据、主要研究内容和方案、研究计划及预期进展。准备英文版 PPT，用英文答辩、问答，每位同学个人陈述 15-20 分钟，评审专家提问环节 5-10 分钟。评审专家组一般至少由 4 位以上教师组成。评审专家根据研究生选题报告以及现场答辩情况给出评审结果。通过后记 2 学分。

Doctoral students should complete dissertation proposal reporting in the third semester, deciding on the topic of doctoral dissertation. The dissertation should be completed in English. The main contents include the scientific basis for the topic chosen, , the main contents, research plans and expected results. Students are required to present the proposal in PPT slides and deliver in English in 15-20 minutes; and question-answer session will last 5-10 minutes. The reviewer panel is made up of at least four or more professors. Students will obtain 2 credits by completing the whole series of activities.

3．中期考核（Mid-term Assessment）

中期考核一般在第四学期完成，需提交《中期进展报告》、成绩单，并参加答辩报告会。中期报告使用英文填写《中期进展报告》，经导师签字确认。准备英文版 PPT，用英文答辩、问答，每位同学个人陈述 15-20 分钟，评审专家提问环节 5-10 分钟。评审专家小组应由至少 5-7 名本学科或相关学科博士生指导教师组成。专家依据博士研究生的论文课题进展情况进行考核，必要时可参阅其课程学习和选题报告情况进行综合评议，并给出考核结果。

The mid-term assessment is generally completed in the fourth semester. It is required that students submit the “Med-term Progress Report” and transcripts. The report is completed in English and signed by the tutor. Students will deliver the depart in PPT slides and speak in English for 15-20 minutes and question-answer session will be in English and will last for 5-10 minutes. The reviewer panel is made up of at least 5-7 doctoral supervisors of the discipline undertaken and the related disciplines.

博士生中期考核实行分流机制，中期考核合格者将获得相应学分。在本次考核中，中期考核不合格者将被确定为初步分流对象；凡培养计划中任何一门课程不及格，或未完成之前的选题报告，或未经学院批准无故不参加中期考核者将被直接认定为初步分流对象。被认定为初步分流对象的博士研究生仍可申请参加在随后一学期的补考核（具体时间由学院确定）。凡在补考核中，仍未通过者，均视为补考核不通过，并将被认定为最终分流对象。

博士中期考核合格后记 6 学分。

The doctoral student's mid-term assessment is important. Those who pass the mid-term assessment will obtain 6 credits. Those who fail in the mid-term assessment will have a second chance. And if they still fail another time, they will be terminated from their doctoral program. Candidates who fail in any course work, or who hasn't completed completing dissertation proposal or who was absent from mid-term assessment without approval will be the students to be terminated from their program if they fail again in the second chance given.

4．预答辩（Pre-defense Report）

研究生完成学位论文及培养计划规定的内容后，在规定的时间提交学位申请书、学位论文、学习成绩单以及在学期间发表的学术论文和取得的研究成果证明，在指导教师审查同意后组织预答辩。

After the completion of the dissertation, students are required to take part in the pre-oral dissertation defense reporting meeting. Before the meeting, , the doctoral candidates are to submit the degree application, dissertation, academic transcript, journal articles and the proof of research results to the office managing the graduate affairs.

5．学位论文（Dissertation）

对博士研究生，学位论文应在指导老师指导下由研究生本人独立完成，如果实际科研中存在多位指导老师，在学位论文上应同时署名多位导师。论文应在科学或专门技术上做出创造性成果，并在理论上或实际上，对社会主义建设有较大的意义；用于博士学位论文的工作时间一般应有 2 个学年左右。

The dissertation should be completed independently by the graduate candidates under the guidance of their supervisor. If there are two or more supervisors for a candidate, all of them will sign their names on the copyright page and innovation announcement page of the dissertation. The dissertation research should demonstrate the research has brought about innovative findings in science or technology, and the results are significant in theory or practice to the development of the country. The working time for doctoral dissertations research generally is about 2 academic years.

学位论文内容一般应包括：独创性声明、保护知识产权声明、中英文摘要、目录、引言、正文（理论分析；实验装置和测试方法；对实验结果的分析、讨论与理论计算结果的比较）、结论、致谢、参考文献、攻读博士学位期间的研究成果及附录等。博士学位论文 5 万字左右。文字要语句精练通顺，条理分明，文字、图表清晰整齐。

The structure of the dissertation generally includes the following sections: statement of originality, statement of protection of intellectual property rights, abstract, contents page, introduction, body of the text (theoretical analysis; experimental setup and methods; analysis of experimental results, comparison of discussion and theoretical results), conclusion, acknowledgments, references, research results during the PhD study and appendices. The doctoral dissertation is about 50,000 words long. The dissertation must be read smooth, logical, and the graphs and characters must be clear in print.

六、培养环节时间节点(Timeline and milestones）

博士 Doctoral program	课程学习 Course Work	开题报告 Dissertation Proposal	中期考核 Mid-term Assessment	预答辩 Pre-oral dissertation defense reporting	论文答辩 Oral Dissertation Defense
时间点 Timeline	第一年 First Year	第三学期 Third Semester	第四学期 Fourth Semester	对应学位会指定日期之前 Before the designated date of the corresponding degree committee meeting	对应学位会指定日期之前 Before the designated date of the corresponding degree committee meeting
具体要求 Specific requirements	完成课程设置要求的所有内容 Complete all the course work	提交选题报告、通过答辩 Submit dissertation proposal and report it in a meeting to pass it	提交中期考核报告、通过答辩 Submit the mid-term assessment report and pass the oral defense	完成通过所有课程、必修环节考核，满足所在中心毕业要求，完成博士学位论文初稿并通过学术不端检测 Complete all course work compulsory activities, fulfill other graduation requirements, complete doctoral dissertation and pass the academic misconduct test	完成预答辩，通过送审，经过答辩审批 Complete the pre-oral defense reporting, pass the dissertation reviewing, and pass the oral dissertation defense

人文社会科学学院/马克思主义学院

School of Humanities and Social Science /School of Marxism

人文社会科学学院/马克思主义学院

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“中国文化研究”和“中国改革与发展”国际硕士研究生中英文培养方案

International Graduate Programs in Chinese Culture Studies/ China’s Reform and Development

一、培养目标（Program Objectives）

“中国文化研究”硕士（国际招生，英文名为 Master of Arts in Chinese Culture Studies, 简称 MACC。）是西安交通大学人文学院专门为外国留学生设立的，以人文和社会科学教育为主要内容的硕士学位。本项目定位于构建国际学生了解中国、理解中国文化、增强中外文化交流的研究生教育平台,旨在培养充分理解理解中国文化与社会、具有较强的中国文化与社会研究能力。

Master of Arts in Chinese Culture Studies, referred to as MACC, is a master’s degree program for international graduate students, with education of humanities and social sciences as the main content. The program aims to t build a graduate education platform for international students to understand China and Chinese culture, and enhance cultural exchange between China and other countries. With the program, international graduate students will comprehensively understand Chinese culture and society and have better ability to study Chinese culture and the society.

“中国改革与发展”硕士是西安交通大学马克思主义学院专门为外国留学生设立的，以马克思主义理论教育为主要内容的硕士学位。本项目定位于构建国际学生了解中国、理解中国经济、文化和法制、增强中外文化交流的研究生教育平台。“中国文化研究”硕士和“中国改革与发展”硕士旨在培养能够在世界各地从事与中国有关的文化交流、外交、商贸、管理、教学等工作的复合型、国际型人才。

Master of China’s Reform and Development is a master’s degree program for international graduate students, with Marxist theoretical education as the main content. The program aims to build a graduate education platform for international students to understand China, understand China’s economy, culture and legal system, and enhance cultural exchange between China and other countries.

Master of Arts in Chinese Culture Studies and the Master of China’s Reform and Development will cultivate multi-disciplinary and international talents who can engage in cultural exchange, diplomacy, commerce, management and teaching related to China.

二、研究方向（Research fields）

哲学、社会学、艺术学、马克思主义理论。

Philosophy, Sociology, Art and Marxist Theory

三、学习年限（Length of programs）

国际硕士研究生学习年限一般为 2 年。

The length of Masters' programs is 2 years.

四、培养方式（Program overview）

以立德树人为根本任务，已培养具有国际视野的创新性人才为目标的全日制在读硕士研究生。在导师的指导下选课、学习，完成培养计划中的所有学分要求。

Taking establishing morality and educating students as the fundamental task, we aim at cultivating full-time international graduate students with innovative mind and international vision. Under the guidance of their tutor, they select and study the courses, and complete all the credit requirements of the programs.

五、课程学习(Course work)

根据《西安交通大学国际研究生按类培养实施细则》（以下简称《细则》）确定以下相关课程和学分要求。哲学、社会学和艺术学类学术学位硕士生课程应至少取得 28 学分，包括：公共课（汉语（Ⅰ）2 学分、中国概况（Ⅰ）2 学分、政治理论（A）2 学分）6 学分、专业学位课至少 8 学分，选修课选修的学分不低于 14 个学分。新港报告纳入国际留学生选修课，学生听够 20 场讲座后可记 2 学分。

Master's Programs in the areas of philosophy, sociology and arts require at least 28 credits for their course work. Required courses include *Comprehensive Chinese* (2 credits), *Outline of China* (2 credits), *Political Theory A* (2 credits), degree courses (no less than 8 credits), and elective courses (no less than 14 credits) according to degree requirements. Innovation Harbour Lectures are included in elective courses for international students, 2 credits will be granted after attending 20 Lectures.

必修环节包括：学术活动（讲座）1 学分、中期考核 3 学分。

Other compulsory activities include academic lectures (for masters) (1 credit) and mid-term assessment (3 credits).

中国文化研究硕士研究生课程设置和学分要求

课程类型 Course Type	**序号** No.	**课程编码** Course number	**统一编码** Course Code	**课程名称** Course Title	**学分** Credit	**备注** **Notes**
公共学位课 Public Degree Course	1	272003	LITE610112	中国概况（Outline of China）	2	必修 6 学分 6 credits required
	2	272004	LITE610227	综合汉语（Comprehensive Chinese）	2	

课程类型 Course Type	序号 No.	课程编码 Course number	统一编码 Course Code	课程名称 Course Title	学分 Credit	备注 Notes	
	3	141007	MLMD600614	Governance Reform in China	2		
专业学位课 Specialized Degree Course	1	103040	SOCL740110	中国当代社会（Contemporary Chinese Society）	2	人文硕士必修（马院选修）	至少修8学分 A minimum of 8 credits required
	2	103041	SOCL740210	性别与中国社会（Gender and Chinese Society）	2		
	3	103042	PHLS740110	中国古代科技与文明（Cultural Perspective of Science and Technology in Ancient China）	2		
	4	103043	PHLS740210	中国古代哲学世界（Classical Chinese Philosophy）	2		
	5	143007	MLMD640214	中国改革发展专题研究（A Study of China's Reform and Opening-up）	2	马院硕士必修（人文选修）	
	6	143006	MLMD640114	一带一路倡议与中国开放格局研究（The OBOR Initiative and the open policy of China）	2		

课程类型 Course Type	序号 No.	课程编码 Course number	统一编码 Course Code	课程名称 Course Title	学分 Credit	备注 Notes	
	7	143009	MLMD640414	当代中国国际战略与外交政策研究（Studies On Contemporary China's International Strategy and Diplomacy）	2		
	8	143008	MLMD640314	中国红色文化精神概论（Chinese Red Culture Spirit）	2		
选修课 Elective Course	9	103044	SCTR740110	HSK 初级应试训练 (Primary Test Training)	2	不低于 10 学分 At least 10 credits	
	10	102213	CUIC712210	国际传播（International Communication）	2		
	11	103046	LITE740110	中国古代诗歌（Classical Chinese Poems）	2		
	12	103047	LITE740210	科幻与想象力（Science Fiction and Imagination）	2		
	13	103051	ARTS740310	中国艺术史（Chinese Art History）	2		
	14	103049	ARTS740110	中国音乐鉴赏（Chinese Music Appreciation）	2		

课程类型 Course Type	序号 No.	课程编码 Course number	统一编码 Course Code	课程名称 Course Title	学分 Credit	备注 Notes
	15	103050	ARTS740210	中国建筑与景观文化遗产保护（Chinese Architecture and Landscape Cultural Heritage Protection）	2	
	16			在全校研究生课程目录中选修 (Elective Courses in the Curriculum for Graduates)	/	至多选修 4 学分 4 credits at most
必修环节	1	001997	BXHJ600399	学术活动(讲座)(硕) (Lectures)（for Masters）	1	必修 4 学分 4 credits required
	2	001983	BXHJ600799	中期考核（Mid-term Assessment）	3	

六、培养环节（Compulsory Activities）

1．学术活动（讲座）（Lectures）

国际硕士研究生学术活动（讲座）分为必听讲座和选听讲座。必听讲座包括“科学道德与学风建设”1 次、“职业生涯发展与规划导论”1 次；选听讲座包括与学科紧密相关的“学科前沿系列专题讲座”（由各二级学科组织若干教授对本学科前沿知识进行讲座，每个讲座由 5 个以上讲座组成）一个系列和在全校范围内选听“学术讲座”1 次，完成全部 8 个讲座后记 1 学分。

Master's students' academic activities (lectures) include compulsory lectures and elective lectures. The compulsory lectures include Scientific Morality and Construction of Study Style, Introduction to Career Development and Planning. The elective lectures include one series of Specialized Lectures on the Frontiers of the Discipline closely related to their courses (A number of professors give lectures on the frontier knowledge of their disciplines organized by the respective school, of which each lecture consists of more than 5 lectures) and one lecture in the whole university. Students get one credit after completing all eight lectures.

2．开题报告（Thesis Proposal Report）

开题报告的时间一般为入学后的第二学期内完成，开题报告的形式为汇报答辩、专家问答式。开题报告应在导师指导下由研究生撰写，经导师同意方可开题。

The time for completing the thesis proposal report is generally before the end of the second semester after their registration. The form of thesis proposal reporting is that the student deliver the report and answers the questions from the panel of experts. The report should be written by the graduate student under the guidance of their tutor. They can attend the reporting meeting with the consent of their tutors.

3．中期考核（Mid-term Assessment）

中期考核的时间一般为入学后的第三学期内完成，具体参照西安交通大学《关于加强硕士生培养过程质量监控的若干规定》（西交研〔2009〕18 号）执行。中期考核采取考核答辩、专家打分的方式。

The time for the mid-term assessment is generally within the third semester after their registration according to the regulations of *Several Provisions on Strengthening the Quality Control of Master Students' Cultivation Process of Xi'an Jiaotong University, the No.18 document by Graduate School of Xi'an Jiaotong University* in 2009. The mid-term assessment adopts the methods of assessment oral defense and experts scoring it.

4．预答辩（Pre-oral defense Reporting）

学位论文后在系（所）单位内进行预答辩的，具体参照《西安交通大学学位授予工作暂行办法》（西交研〔2003〕14 号制定。

After completing the dissertation, the pre-oral defense reporting will be carried out in each school. The specific regulation is the Xi'an Jiaotong University Tentative Measures for the Granting of Degrees, the No.14 document by Graduate School of Xi'an Jiaotong University in 2003.

5．学位论文（Dissertation）

国际研究生完成学位论文的论文水平、论文开展时间、论文选题、申请学位的要求等与国内研究生保持一致。(参照《西安交通大学学位授予工作暂行办法》（西交研〔2003〕14 号）)

The requirements for the international graduate students to complete their dissertation, include the level of the dissertation, the completion time of the dissertation, the topic selection of the dissertation, and their applying for a degree are consistent with the domestic graduate students. The specific documents e is the Xi'an Jiaotong University Tentative Measures for the Granting of Degrees, the No.14 document by Graduate School of Xi'an Jiaotong University in 2003.

七、培养环节时间节点（Timeline and milestones）

学位类型 Program Type	课程学习 Course Work	开题报告 thesis proposal	中期考核 Mid-term Assessment	预答辩 Pre-oral thesis defense meeting	论文答辩 Oral Thesis defense)
硕士 Master Program	第 2 学期内全部完成 first two semesters	第 2 学期结束前完成 end of the second semester	第 3 学期结束前完成 end of the third semester	第 4 学期初完成 beginning of the fourth semester	第 4 学期的 5 月中旬完成 mid-May of the fourth semester