



南京航空航天大學

Nanjing University of Aeronautics and Astronautics (NUAA)

**CERTIFICATE OF BACHELOR'S DEGREE**

Certificate No.: 1028742016040227

This is to certify that *Xing Liu, female*, born on *April 26, 1996*, has studied in the 4-year undergraduate program of *Microelectronics* at Nanjing University of Aeronautics and Astronautics, and has completed all the courses as required with satisfactory results and is hereby granted graduation.

Having passed the examination in accordance with the requirements stipulated in the Regulations on Academic Degree of the People's Republic of China, the aforesaid student is awarded the degree of *Bachelor of Engineering*.

President and Chairman of Degree Evaluation Committee: **Hong Nie**

Nanjing University of Aeronautics and Astronautics

Issue Date: June 20, 2016





南京航空航天大學

Nanjing University of Aeronautics and Astronautics (NUAA)

DIPLOMA

Certificate No.: 102871201605040227

This is to certify that *Xing Liu, female*, born on *April 26, 1996*, has studied in the 4-year undergraduate program of *Microelectronics* at Nanjing University of Aeronautics and Astronautics from *September 2012* to *June 2016*, and has completed all the courses as required with satisfactory results and is hereby granted graduation.

President: **Hong Nie**

Nanjing University of Aeronautics and Astronautics

Issue Date: June 20, 2016



# Academic Records of Nanjing University of Aeronautics and Astronautics

May.31,2023

Basic Information			Required Courses and Electivourses												Electives Courses						
	Student No.	041230102	Course Name	Hours	Credit	GP	Grade	Remarks	Course Name	Hours	Credit	GP	Grade	Remarks	Course Name	Hours	Credit	GP	Grade	Remarks	
	Name	Xing Liu	Overview of Aeronautics and Astronautics	26	1.5	2.1	71	EC	Introduction to theoretical System of Socialism with Chinese Characteristics and Mao Zedong Thought	96	6.0	4.5	95	RC	Introduction to Art	32	2.0	3.5	B	EC	
	Class No.	0412301	Introduction to Electronic Information Science and Technology	16	1.0	3.8	88	RC	Health Education(1)	10	0.5	2.5	C	RC	Chinese Language and Literature	24	1.5	2.5	C	EC	
	Gender	Female							GPA of the 4th term:			4.2			Training and Testing of Mandarin	16	0.5	2.5	C	EC	
	Date of Birth	Apr.26,1996	Advanced Mathematics(1)	88	5.5	4.3	93	RC							Finance and Taxation	32	2.0	4	90	EC	
	Date of Registration	Sept.6,2012	Linear Algebra	40	2.5	5	100	RC	Semiconductor Physics and Instrument	68	4.0	4	90	RC	Basic Experiments of Computer Technology	32	2.0	3.5	B	EC	
	Length of Schooling	4 Years	Situation and Policy Education	32	2.0	3.5	B	RC	Theory of Electromagnetic Field	67	4.0	4.4	94	RC	Civil Law and Judicial	32	2.0	3.5	85	EC	
	Education Level	Undergraduate	Ideological Ethics Accomplishments and Foundation of Law	48	3.0	3.7	87	RC	Integrated Circuit Process Technology	32	2.0	3.7	87	RC	Information Search and Application	24	1.5	3.5	B	EC	
College			Visual, Audio and Oral English II	48	2.0	3.3	83		Foundation Application of Micro-controller	50	2.5	3.4	84	EC							
College of Electronic and Information Engineering			Comprehensive English III	32	2.0	2.7	77														
Major			University Information Technology Foundation	24	1.5	4.1	91	EC	Design and Development of Embedded Systems	40	2.0	4.1	91	EC							
Microelectronics			Concentration																		
			Physical Education(1)	26	1.0	3.8	88	RC	Communication Circuits	56	3.5	4.7	97	RC							
ID Card No.	430421199604263982			Military Education	36	2.0	2.5	C	RC	Digital Signal Processing	56	3.5	3.4	84	RC	Practice Courses					
Graduation Status	graduation			Mental Health Education of College Students	18	1.0	3.5	B	RC	Random Signal Analysis	56	3.5	2.3	73	EC	Course Name	Week	Credit	GP	Grade	Remarks
Graduation Date	Jun.20,2016			College students' Career Development and Planning(1)	12	0.5	2.5	C	RC	Basic Principle of Marxism	48	3.0	3	80	RC						
Degree Conferred	Bachelor of Engineering			GPA of the 1st term:			3.7			Physical Education(3)	26	1.0	3.7	87	RC	Military Training at School	3	3.0	3.5	B	RC
Thesis Title			Advanced Mathematics(2)	112	7.0	4.0	90	RC	GPA of the 5th term:			3.8			College Physics Experiments(1)	32	1.0	3.5	B	RC	
			College Physics I(1)	72	4.5	3.3	83	RC	Electronic Measurement Technology	32	2.0	1.9	69	EC	College Physics Experiments(2)	16	0.5	2.5	C	RC	
			Introduction to Chinese Modern History	32	2.0	3.8	88	RC	Testing of Digital Systems and Design Basics of Testability	32	2.0	3.1	81	EC	College students' Career Development and Planning(2)	4	0.5	3.5	B	RC	
			Visual, Audio and Oral English (I)	48	1.0	4	90		Microwave Technology and Antenna	64	4.0	4.2	92	EC	Project of Digital Circuits	1	1.0	3.5	B	RC	
			Comprehensive English I	32	1.0	4	90		Analog Integrated Circuit Design	56	3.5	3.7	87	RC	Digital Circuit Experiment	16	0.5	3.5	B	RC	
			Comprehensive English (II)	32	1.0	4	90		Digital Integrated Circuit Design	56	3.5	3.7	87	RC	Practice for Electronic Technology	1	1.0	3.5	B	RC	
National College English Test			Visual, Audio and Oral English III	48	2.0	2.5	75		Fundamentals of Communication	64	4.0	4.4	94	RC	Project of Electronic Circuits	1	1.0	4.5	A	RC	
Course Name	Grade	Date	Remarks	Comprehensive English IV	32	2.0	3.4	84		DSP Principle and Application	40	2.0	3.5	B	EC	Project of Microcomputer Principle	1	1.0	4.5	A	RC
College German Test Band four	69	Jun.13,2015		Programming of C++ Language	72	4.0	4.4	94	RC	Digital Image Processing	58	3.0	3.7	87	EC	Experiments of Electronic Circuits	16	0.5	4.5	A	RC
Band Six	478	Dec.14,2013		Physical Education(1)	34	1.0	3.7	87	RC	Physical Education(4)	34	1.0	3.9	89	RC	Experiments of Signal and Systems	16	0.5	3.5	B	RC
Band Four	553	Jun.15,2013		GPA of the 2nd term:			3.7			GPA of the 6th term:			3.8			Experiments of Microcomputer Principle	16	0.5	3.5	B	RC
Remarks			Fundamentals of Circuit Analysis	90	5.0	3.4	84	RC	Special Topic Writing on Science and Technology	8	0.5	1.3	63	RC	Project of Communication Circuits	1	1.0	3.5	B	RC	
			Digital Circuits and Logical Design I	64	4.0	4	90	RC						Project of Communication Circuits	1	1.0	3.5	B	RC		
			Complex Analysis II	24	1.5	4.3	93	EC	Health Education(2)	10	0.5	2.5	C	RC	Experiments of Communication Circuits	16	0.5	4.5	A	RC	
			Probability Theory and Mathematical Statistics II	48	3.0	3.7	94	RC	GPA of the 7th term:			3.1			Engineering Training III	2	2.0	3.2	82	RC	
			Computational Methods	24	1.5	1.9	69	EC	GPA of the 8th term:			4.5			Experiments of Communication Principle	16	0.5	3.8	88	RC	
			College Physics I(2)	48	3.0	3	80	RC							Experiments of Microwave Technology and Antenna	16	0.5	3.5	B	EC	
			Modern Physics	56	3.5	2.9	79	EC													
			Intellectual Property Rights	16	1.0	4.1	91	RC													
Correspondence Between the Average Score and GPA			Visual, Audio and Oral English V	48	2.0	3.1	81								Social Practice	4	2.0	3.5	B	RC	
			Appreciation of English Movie	32	2.0	2.3	73								Practice of Production	3	3.0	2.7	77	RC	
Score	GPA		GPA of the 3rd term:			3.4									Integrated Circuit Design	2	2.0	4	90	RC	
90~100	4~5		EDA Technology	44	2.0	2.8	78	EC							Graduation Project	24	12.0	4.5	A	RC	
80~89	3~3.9		Electronic Circuits	64	4.0	3.7	87	RC													
70~79	2~2.9		Digital System CAD	40	2.0	3.6	86	EC													
60~69	1~1.9		Microcomputer Principle and Application	64	4.0	4.4	94	RC													
0~59	0		Signal and System	72	4.5	4.7	97	RC	Cumulative GPA:			3.8									
Grading System	①Centesimal System ②Five-letter Grading System: 1. A(100-90,Excellent),B(89-80,Good),C(79-70,Medium),D(69-60,Pass),F(59 or less,lseisure),-(Missing exam or Qualification of exam being canceled); ③RC(Required Course),EC(Elective Course),PC(Practice Course)																				



# 国防科技大学研究生院

Graduate School,National University of Defense Technology,Changsha,Hunan,410073,P.R.C

## Graduation Certificate of Master's Degree Candidate

This is to certify that Liu Xing, Female, born on April. 4,1996, majoring in Electronic Science and Technology from Sep.2016 to Dec. 2018, has completed and passed all the courses stipulated by the graduate degree program, and has successfully fulfilled the thesis, therefore is qualified to graduate.

Training Program Offered by: National University of Defense Technology

Registered Certificate No.: 910021201802000253

Date of Graduation: Dec. 31, 2018



**GRADUATE SCHOOL OF NATIONAL UNIVERSITY OF DEFENSE TECHNOLOGY**  
**ACADEMIC RECORD ( ENGLISH TRANSLATION )**

Name: Liu Xing	Department: College of Electronic Science and Technology				Specialty: Electronic Science and Technology				
Program: ① Master's Degree ( <input checked="" type="checkbox"/> )    ② Doctor's Degree ( <input type="checkbox"/> )    ③ Non-Degree ( <input type="checkbox"/> )					Note: Make <input checked="" type="checkbox"/> in ( <input type="checkbox"/> )				
Date of Admission: September 2016					Date of Graduation: December 2018				
No.	Course	Class Hours	Credit	Record	No.	Course	Class Hours	Credit	Record
1	Fundamentals of Applied Mathematics	72	4	A	8	Microwave circuit and system simulation design experiment	18	1	B
2	Advanced Electromagnetic Field Theory	54	3	A	9	Russian	80	2	A
3	Digital Signal Processing	54	3	B+	10	English translation for science and technology	40	1	B+
4	Circuit System Design	36	2	B+	11	Introduction to Dialectics of Nature	30	0.5	B+
5	Mircrowave Systems and Engineering	36	2	A	12	Marxist Theory—Research on the Theory and Practice of Socialism with Chinese Characteristics	40	1	B+
6	Advanced Antenna Theory and Engineering	36	2	B+	13	Electronic system modeling, simulation and evaluation	36	2	C+
7	Seminar on Radio Frequency Technology in Electronic	18	1	B+					
Grading System: System I (SI examination)                      System II (SII non-examination) A : 90 - 100    Excellent                      Pass,       Fail B+ : 85 - 89 B : 80 - 84    Good C+ : 75 - 79 C : 70 - 74    fair D+ : 65 - 69 D : 60 - 64    poor					 Official Seal				