

# Program Specification Document

## MA in Geography and Geoinformatics Program

### Basic Information about the Program

<b>Program Title and Final Award</b>	Master's degree in Geography and Geoinformatics
<b>Awarding Body/ Institution</b>	Faculty of Arts & Human Sciences – Sana'a University
<b>Teaching Institution/ Responsible Department</b>	Department of Geography and Geoinformatics
<b>Other Departments involved in Teaching the program</b>	Nil
<b>Medium of Instruction</b>	Arabic
<b>Program Start Year (for Newly Specified Programs)</b>	2023-2024
<b>Study Mode</b>	Regular
<b>Place of Study</b>	Faculty of Arts & Humanities – Sana'a University Campus
<b>Type of Program</b>	MA program (Courses + Thesis)
<b>System of Study</b>	Semester system
<b>Duration of the Program</b>	Two-semester coursework (30 hours) MA Thesis (6 hours) Minimum 2 years and Maximum 3 years Total (36 hours)
<b>Possible Future Career Options for Graduates</b>	Specialist and researcher in geographical issues, environmental problems, and development planning, as well as geographic information systems and remote sensing. Expert in the field of economic and strategic geography, natural resources, and development planning programs at the local and international levels. Working in various research and academic institutions.
<b>Levels of Award/ Final Award</b>	Master's degree in Geography and Geoinformatics

<b>Prerequisite Qualifications</b>	Bachelor's Degree in Geography and Geoinformatics according to the University's relevant Regulations and Bylaws.
<b>Required Average Grade for Admission</b>	65% (good)
<b>Other Requirements</b>	<ol style="list-style-type: none"> <li>1- The applicant must be Yemeni or hold an official scholarship for postgraduate studies if they are non-Yemenis.</li> <li>2- The student must pass the personal interview for the program.</li> <li>3- The applicant must not have been expelled from any other university for disciplinary reasons.</li> <li>4- The student must pay the prescribed tuition fees according to the university regulations.</li> <li>5- The student is not allowed to enroll in more than one postgraduate program.</li> <li>6- The student must meet all the specific requirements for a Master's degree as stated in the university's postgraduate regulations.</li> </ol>
<b>Program Coordinator</b>	<ul style="list-style-type: none"> <li>- Prof. Mohammad Ahmed Hamoud Mayas, Head of the Geography Department</li> <li>- Assoc. Prof. Ali Ahmed Muhammad Ghazwan</li> </ul>
<b>Date of Program Specification/ Latest Accreditation:</b>	2010

### Program Mission and Aims

<b>Program Mission</b>
Preparing cadres capable of creativity, development and contributing effectively to the investigation of natural and human resources to achieve sustainable development plans, employing modern technology in the educational process with a focus on training and field research, and striving towards providing fruitful and effective scientific production that mimics its natural environment and serves the development issues.
<b>Program Aims</b>
<p><b>The program aims to:</b></p> <ol style="list-style-type: none"> <li>1. Providing a distinguished education that focuses on cognitive and technical development in geography to qualify academic staff (teaching assistants) in the various geographical departments at Sana'a University and other Yemeni universities.</li> </ol>

2. Providing students with scientific research skills and field studies of various geographical issues and environmental problems in a way that serves planning and sustainable development in the Republic of Yemen.
3. Preparing skilled and specialized national academic cadres (Master and Doctorate) to meet the needs of the local market and supply official institutions with competent cadres capable of investing in available and latent natural and human resources, developing development plans, and successfully managing development programs and projects.
4. Using scientific research methods, field and applied studies, methods of quantitative and non-quantitative measurements, data analysis of natural resources and human potential, and drawing research conclusions.
5. Providing the student with the ability to employ geographic information systems, remote sensing (geoinformatics) techniques, and producing maps to study the problems facing society in the geographical field and find possible solutions to them.
6. Developing awareness of the cultural heritage and urban developments of Yemen and the specificity of the environmental data of the Yemeni land, and linking it to contemporary global issues and the needs of society in the present and future.
7. Understanding the specificity of Yemen and its development experience to be acquainted with scientific developments and the world successful technical and professional experiences in the field of planning, development, management and investment of available and latent resources, and then emulate them while maintaining balance between originality and modernity.

## Graduate Attributes

<b>Graduate Attributes of Geography and Geoinformatics Department</b>	
<b>1</b>	Acquiring and developing basic knowledge and concepts and being able to use remote sensing techniques and geographic information systems in a way that meets the requirements of the educational process in academic institutions and the needs of the labor market in the field of specialization.
<b>2</b>	Familiarity with scientific methods, modern geographical methods and techniques in studies of natural and human geographical phenomena in collecting and analyzing geographical data, presenting the results and producing maps of various geographical phenomena.
<b>3</b>	Understanding the available and latent environmental data, societal needs, and existing and growing development problems throughout the geography of Yemeni territory, and contribute actively to solving them.
<b>4</b>	Analyzing and interpreting the natural and human factors and standards affecting planning and social, economic and urban development while preserving natural resources, environmental balance, combating desertification...etc.
<b>5</b>	Active participation in developing preventive and remedial solutions to natural and human problems with a geographical dimension, in a way that serves and achieves the objectives of the balanced sustainable local, regional and national comprehensive development plans and programs.
<b>6</b>	Successfully leading the scientific team during surveys, field measurements, and applied geographical studies.
<b>7</b>	Providing state institutions and the private sector with applied studies and scientific research, through authorship and translation, to enrich the national and Arab library with specialized books, fruitful research and distinguished studies, and active participation in local and international forums and conferences.
<b>8</b>	Providing a successful model of academic honesty and a good example of noble behavior and values emanating from the teachings of the true Islamic religion.
<b>9</b>	Understanding the geostrategic importance of the location and the geographical data of the Yemeni land and its territorial waters, and strengthening cooperation and geographical integration with its Arab and Islamic back, to activate its pioneering role in the political map of the world.
<b>10</b>	Developing awareness of cultural and urban heritage of Yemen and its environmental data, and the needs of society to meet the country's public policy, and learning about the world's successful experiences in the field of planning and development to keep pace with scientific developments and link them to contemporary issues, climate changes, and global politics, including serving the nation and the citizen. With a balance between authenticity and modernity.
<b>11</b>	Domesticating the thought and localizing the national geographic knowledge, including planning goals and standards: demographic, economic, and urban, to rationalize the investment and employment of resources in a way that achieves comprehensive and balanced development at the rural and urban levels, in harmony with the data and specificity of the Yemeni identity and the national geographical environment.

## Intended Learning Outcomes (ILOs)

<b>First: Knowledge and Understanding (A)</b>	
<b>After completing the program successfully, the graduate will be able to:</b>	
A1-	Identify the foundations and standards of scientific research in the geographical field.
A2-	Identify modern methods and techniques in geography.
A3-	Discuss methods and approaches for scientific research in theoretical and applied geography.
A4-	Demonstrate knowledge of concepts related to natural and environmental resources, planning and development, geographic information systems and remote sensing (geoinformatics).

<b>Second: Intellectual Skills (B)</b>	
<b>After completing the program successfully, the graduate will be able to:</b>	
B1 -	Analyze data and information to solve geographic problems with a spatial dimension.
B2 -	Classify land uses of natural and human phenomena at the rural and urban levels using geographic information systems and remote sensing.
B3-	Arrange the practical steps and procedural stages that go through the national, regional and local planning and development process in a scientific manner.
B4-	Use the scientific method in thinking as well as asking questions, diagnosing geographic and environmental problems, and proposing appropriate solutions to them.

<b>Third: Professional and Practical Skills (C)</b>	
<b>After completing the program successfully, the graduate will be able to:</b>	
C1-	The ability to continue studying and researching in the field of specialization.
C2 -	Employ field studies skills, modern approaches and techniques to solve urban and rural planning and development problems according to a correct scientific methodology.
C3 -	Apply the skills of rationalizing resources, developing the economy, and maintaining environmental balance.
C4 -	apply procedures for collecting and building various spatial digital databases, analyzing them, processing satellite visuals, and reading and analyzing maps.

<b>Fourth: General Skills (D)</b>	
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<b>After successfully completing the program, the graduate will be able to:</b>	
D1 -	Use modern tools and techniques in geography and masters his role within the team in implementing activities related to geographical sciences.
D2 -	Propose preventive and remedial solutions to reduce the growth of informal urbanization, social problems, economic challenges, and environmental degradation at the rural and urban levels within the work team.
D3 -	Keep up with everything new in the field of specialization.
D4 -	Apply procedures for collecting and building various spatial digital databases, analyzing them, processing satellite visuals, and reading and analyzing maps.

### Study Plan of the Program

<b>First Semester</b>					
Course Title	Contact Hours				Pre- Requested
	Th.	Pr.	Tut.	Total C.H	
Advanced Natural Studies	2	1		3	
Advanced Economic Studies	2	1		3	
Studies in Urban Planning and Development	2	1		3	
Advanced Geographic and Information Systems	2	1		3	
Advanced Remote Sensing	2	1		3	
<b>Total of Credit Hours</b>	<b>10</b>	<b>5</b>		<b>15</b>	

<b>Second Semester</b>					
Course Title	Contact Hours				Pre- Requested
	Th.	Pr.	Tut.	Total C.H	
Advanced Statistical Studies	2		1	3	

Geographic Research Methods	2		1	3	
Advanced Climate Studies	2	1		3	
Advanced Geography Texts	2	1		3	
Contemporary Environmental Issues	2		1	3	
<b>Total of Credit Hours</b>	<b>10</b>	<b>2</b>	<b>3</b>	<b>15</b>	

Course Title	Code / No	Credit Hours
MA Thesis	—	6

Admission Requirements for the Program	
Required specializations:	Bachelor of Arts / Education Equivalency / Geography Diploma for non-specialists
Language level required: TOEFL/IBT	TOEFL
Computer Skills	(ICDL)
Other conditions:	Admission Test + Personal Interview

Graduation Requirements:
<ol style="list-style-type: none"> <li>1. Total hours required for graduation: 30 hours + 6 research hours.</li> <li>2. Minimum grades required for success for each course of the program: 70%</li> <li>3. Total grades required for graduation: (700 Marks)</li> <li>4. Passing the proficiency program in English and Arabic and obtaining a license (ICDL).</li> </ol>