FIRST-YEAR OF BACHELOR OF ARTS VOCATIONAL SKILL COURSE CONNECTED TO MAJOR GEOGRAPHY REVISED SYLLABUS ACCORDING TO CBCS NEP2020

COURSE TITLE: INTRODUCTION TO Q-GIS
SEMESTER-II, W.E.F. 2023-2024

RECOMMENDED BY THE BOARD OF STUDIES IN GEOGRAPHY
AND
APPROVED BY THE ACADEMIC COUNCIL
Devrukh Shikshan Prasarak Mandal's
Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce, and Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh. Tal Sangmeshwar, Dist. Ratnagiri-415804, Maharashtra, India.

Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce and Vid. Dadasaheb Pitre Science College, Devrukh (An Autonomous College Affiliated with University of Mumbai)

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Academic Council Item No: 03

Name of the Implementing Institute	:	Nya. Tatyasaheb Athalye Arts, Ved. S. R. Sapre Commerce, and Vid. Dadasaheb Pitre Science College (Autonomous), Devrukh. Tal. Sangmeshwar, Dist. Ratnagiri-415804,
Name of the Parent University	:	University of Mumbai
Name of the Programme	:	Bachelor of Arts
Name of the Department	:	Geography
Name of the Class	:	First Year
Semester	:	Second
No. of Credits	:	02
Title of the Course	:	Introduction to Q-GIS
Course Code	:	GEVS102
Name of the Vertical in adherence to NEP 2020	:	Vocational Skill Courses (VSC) connected to Major
Eligibility for Admission	:	Any student seeking Admission to the Degree Programme in adherence to the Rules and Regulations of the University of Mumbai and the Government of Maharashtra and opting for Geography as an optional subject (Either major or Minor) is eligible to choose the course
Passing Marks	:	40%
Mode of Assessment	:	Summative
Level	:	UG
Pattern of Marks Distribution for TE and CIA	:	NA
Status	:	NEP-CBCS
To be implemented from the Academic Year	:	2023-2024
Ordinances /Regulations (if any)		

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Syllabus for Vocational Skill Course Connected to Major/ Minor Geography

(With effect from the academic year 2023-2024)

SEMESTER-I   **COURSE CODE: GEVS102**

Course Title: Introduction to Q-GIS   **No. of Credits - 02**

Type of Vertical: Vocational Skill Courses (VSC) connected to Major/ Minor

Learning Outcomes Based on BLOOM's Taxonomy:

After completing the course, the learner will be able to…		
Course Learning Outcome No.	Blooms Taxonomy	Course Learning Outcome
CLO-01	Remember	Fundamentals of GIS
CLO-02	Understand	Understand fundamentals of Q-GIS Software
CLO-03	Apply	Apply the Q-GIS software for map creation.
CLO-04	Analyze	Analyze the different tools available in Q-GIS.
CLO-05	Evaluate	Evaluate the map elements used in Q-GIS.
CLO-06	Create	Create a map using the Q-GIS software.

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Syllabus for Vocational Skill Course Connected to Major Geography

(With effect from the academic year 2023-2024)

SEMESTER-I   **COURSE CODE: GEVS102**

Course Title: Introduction to Q-GIS   **No. of Credits - 02**

Type of Vertical: Vocational Skill Courses (VSC) connected to Major

Module No.	Content	Credits	No. of Hours
	COURSE CONTENT		
1	**Fundamentals of GIS and Q-GIS** o GIS: Concept, Components and Applications o Types of GIS Software: Proprietary and FOSS o Understanding the Q-GIS: Project, Edit, View, Settings, Layer, Plugins, Vector, Raster, Database, Web, Mesh, Processing and Help o Working with Plugins o Searching and Downloading Spatial Data o	01	30
2	**Geo-referencing, Layer Creation and Layout** o Geo-referencing a Topo Map using the latitudes and longitudes o Map to Map Geo-referencing o Transformation Settings in Geo-referencing o Layer Creation: Point, Line and Polygon o Projection and Reprojection of Map o Digitizing Map Data, Topology creation and error correction o Map Layout in Q-GIS o Working with Attributes o Importing Spreadsheets or CSV files	01	30
	Total	02	60

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Required Previous Knowledge

No previous knowledge is required to learn the subject.

Access to the Course

The course is available for all the students admitted for Bachelor of Arts and selected Geography as an optional Subject.

Methods of Assessment:

Vocational skill Courses, Skill Enhancement Courses and courses having laboratory sessions shall be assessed at the end of each semester.

Grading Scale

The grading scale used is O to F. Grade O is the highest passing grade on the grading scale, and grade F is a fail. The Board of Examinations of the college reserves the right to change the grading scale.

References:

1. Q-GIS Manual

2. Peter A. Burrough and Rachael A. McDonnell, 2011, Principles of Geographic Information Systems, Oxford University Press.

3. Ian Heywood, Sarah Cornelius, and Steve Carver, An Introduction to Geographic Information System, 2010, third edition, Pearson Education Ltd.

4. David O' Sullivan and David J. Unwin, 2010, Geographic Information analysis, second edition, John Wiley & Sons.

5. Paul a. Longley, Michael F. Goodchild, David J. Maguire, David W. Rhind, 2011, Geographic Information Systems and Science, third edition, John Wiley & Sons.

6. John R. Jenson and Ryan R. Jensen, 2013, Introductory Geographic Information system, Pearson Education.

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