MARATHWADA MITRA MANDAL'S

COLLEGE OF COMMERCE

Affiliated to Savitribai Phule Pune University, Re-Accredited by NAAC with "A" Grade
ISO 9001:2015 Certified, Awarded as Best College by Savitribai Phule Pune University
202/A, Deccan Gymkhana, Pune – 411004
principal@mmcc.edu.in, enquiry@mmcc.edu.in, www.mmcc.edu.in

Sr. No.	Particulars
1	Brochure - Overview of Geoprocessing using Python
2	Brochure - Geoinformatics for Biodiversity Conservative Planning
3	Brochure - Fundamentals of Arduino and Programming
4	Brochure - Escalate with Excel
5	Brochure - XML using Editix
6	Course Schedule - Geographical Information System
7	Course Schedule - Fundamentals of GIS Technology
8	Syllabus Links for Value Added/Add-on Courses

IIRS Outreach Programme

The IIRS outreach programme, which was started in 2007 with 12 universities/ institutions has now grown substantially to 2900+. The beneficiaries of the programme may include:

- Central/State/Private Universities & Academic Institutions
- Central & State Government Organisations/ Departments
- Forest Resource Professionals
- State Forest Departments/Forest Training Academies
- Research Institutes
- NGOs

Feedback Mechanism

IIRS has conducted workshops and sessions during IIRS Academia Meet to take feedback from participating institutions to improve the quality of future courses.

IIRS Outreach programme feedback session during IIRS Academia Meet (IAM)-2020

Awards of Appreciation

IIRS has received national awards for excellence in training for outreach and e-learning programme during 1st National Symposium on Excellence in Training conducted during April 11-12, 2015 in New Delhi by Department of Personnel & Training (DoPT), Govt. of India in collaboration with United Nations Development Programme (UNDP).

About IIRS

Indian Institute of Remote Sensing (IIRS) under Indian Space Research Organisation (ISRO), Department of Space, Govt. of India is a premier Training and Educational Institute set up for developing trained professionals in the field of Remote Sensing, Geoinformatics and GNSS Technology for Natural Resources, Environmental and Disaster Management. Formerly known as Indian Photo-interpretation Institute (IPI), founded in 1966, the Institute is the first of its kind in entire South-East Asia. While nurturing its primary endeavour to build capacity among the user community by training mid-career professionals, the Institute has enhanced its capability and evolved many training and education programmes that are tuned to meet the requirements of various target groups, ranging from fresh graduates to policy makers including academia.

IIRS also conducts e-learning programme on Remote Sensing and Geoinformation Science (*https://elearning.iirs.gov.in*).

Contact Details

Dr. Hitendra Padalia
Head, FED & Course Director

Dr. Ishwari Datt Rai
Course Coordinator

IIRS DLP Team

Dr. Harish Karnatak
Head, GIT & DL Dept.

Dr. Poonam S Tiwari
Programme Coordinator
IIRS Outreach Programme

Mr. Janardan Vishwakarma
&
Mr. Ashok Ghildiyal
Tel: 0135-2524130; Email: *dlp@iirs.gov.in*

Indian Institute of Remote Sensing,
Indian Space Research Organisation
Department of Space, Govt. of India,
4 Kalidas Road, Dehradun
Email: *dlp@iirs.gov.in*

93rd IIRS Outreach Programme

Geoinformatics For Biodiversity Conservation Planning

December 06-17, 2021

Organised by

Indian Institute of Remote Sensing
Indian Space Research Organisation
Department of Space, Govt. of India
Dehradun

www.iirs.gov.in

About the Course

Geoinformatics have pronounced role on assessing spatial biodiversity information for conservation assessment and planning. With advent of advanced remote sensing sensors and machine learning tools, it enabled a better understanding of the ecological systems for decision making. Remote sensing applications has been widely used as a source of environmental information for monitoring biodiversity elements. The temporal dimension of remote sensing is a valuable attribute for studies of biodiversity and habitats at landscape to global scales, providing a means to study the impacts of environmental change. Advance machine learning tools are efficient in analysing large volume of data for accurately mapping the biodiversity patterns and monitoring the changes. There has been considerable development in cloud computing with regard to handling large data set on free web platforms for visualization and geospatial analysis. With the development of new active and passive sensors with improved spatial, spectral, radiometric, and temporal resolutions, Earth observation data along with better data integration approaches can contribute immensely to biodiversity change research.

Course Contents

- Applications of GIS in biodiversity conservation planning
- Fine scale mapping of vegetation using machine learning
- 3D characterisation of forest biodiversity
- Functional biodiversity assessment using geoinformatics
- Wildlife habitat suitability assessment using geoinformatics
- Cloud computing for forest monitoring
- Biodiversity informatics and wildlife telemetry

Target Participants

The course is designed for professionals from Central/State Govt./Private Organizations/NGO/students and researchers engaged in ecological studies.

Course Study Material

Course study materials like lecture slides, video recorded lectures, open source software & handouts of demonstrations, etc. will be made available through e-class. Video lectures will also be uploaded on e-class (https://www.eclass.iirs.gov.in/login).

Course Fee

There is no course fee for attending this programme.

Course Registration

- Course updates and other details will be available on URL- http://www.iirs.gov.in/Edusat-News/.
- All the participants has to register online through registration page available on above web page

Course Funding & Technical Support

The programme is sponsored by IIRS, Indian Space Research Organisation, Department of Space, Government of India.

Programme Reception

- Individuals can attend the course live via any web-browser through the e-class portal of IIRS, Dehradun i.e. https://eclass.iirs.gov.in
- The participants can also attend the live sessions via the Youtube channel of IIRS i.e.
- https://www.youtube.com/user/edusat2004
- The content will be available offline after 24hrs in the e-class portal.

Award of Certificate

- All the participants who attend 70% sessions of the course via e-class portal.
- The participants who attend the course sessions via IIRS YouTube channel should mark their attendance via offline session available after 24hrs.

IIRS Outreach Programme

The IIRS outreach programme, which was started in 2007 with 12 universities/ institutions has now grown substantially to 2500+ network institutes. The beneficiaries of the programme may include:

- Central/State/Private Universities & Academic Institutions
- Central & State Government Departments
- Forest Resource Professionals
- State Forest Departments/Forest Training Academies
- Research Institutes
- Geospatial Industries
- NGOs

Feedback Mechanism

IIRS has conducted eleven workshops in 2007, 2009, 2010, 2013, 2014, 2015, 2016.2017,2018,2019 and 2020 to take feedback from participating institutions to improve the quality of future courses.

Feedback session during IIRS User Interaction Meet (IUIM)-2020

Awards

IIRS has received national awards for excellence in training for outreach and e-learning programme during 1st National Symposium on Excellence in Training conducted during April 11-12, 2015 in New Delhi by Department of Personnel & Training (DoPT), Govt. of India in collaboration with United Nations Development Programme (UNDP).

About IIRS

Indian Institute of Remote Sensing (IIRS) under Indian Space Research Organisation (ISRO), Department of Space, Govt. of India is a premier Training and Educational Institute set up for developing trained professionals in the field of Remote Sensing, Geoinformatics and GNSS Technology for Natural Resources, Environmental and Disaster Management. Formerly known as Indian Photo-interpretation Institute (IPI), founded in 1966, the Institute boasts to be the first of its kind in entire South-East Asia. While nurturing its primary endeavour to build capacity among the user community by training mid-career professionals, the Institute has enhanced its capability and evolved many training and education programmes that are tuned to meet the requirements of various target groups, ranging from fresh graduates to policy makers including academia.

IIRS also conducts e-learning programme on Remote Sensing and Geoinformation Science (*http://elearning.iirs.gov.in*).

Contact Details

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IIRS Outreach Programme
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IIRS DLP Team
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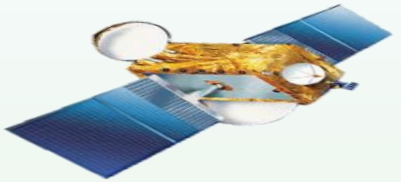
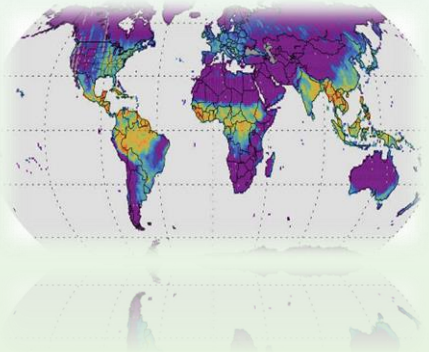
&
Mr. Ashok Ghildiyal
Tel: 0135-2524130
Email- *dlp@iirs.gov.in*

Indian Institute of Remote Sensing,
Indian Space Research Organisation
Department of Space, Govt. of India,
4-Kalidas Road, Dehradun

73rd IIRS Outreach Programme





Overview of Geo-processing using Python

January 18-29, 2021

Organised by

Indian Institute of Remote Sensing
Indian Space Research Organisation
Department of Space, Govt. of India
Dehradun

www.iirs.gov.in

About the Course

Today large amount of satellite imagery and geospatial data collected from different sources is available at free of cost. Satellite imagery combined with power of Geographic information System can be a great tool for supporting environmental management, disasters, global climate change, natural resources, wildlife, land cover and many other applications.

Processing this vast amount of data in time and space efficient manner and deriving useful information and knowledge from data is one of the most challenging aspect of geospatial technology.

We invite you to attend this training program on Geo-processing and visualization on web platforms. The course is scheduled from January 18-29, 2021.

Curriculum

- Overview of GIS and different geospatial data types
- Overview to Python programming using
- Introduction anaconda and Jupyter notebook
- Raster data processing, resampling and analysis
- Vector data processing and analysis
- Geo-spatial data visualization on web
- Familiarization to various open source geospatial data processing libraries e.g. GDAL, Geopandas etc.

Expected Outcome

At the end of this course participant must be able to

- Write program in python to read, write and process different raster formats.
- Write program in python to read, write and process different vector formats.
- Write program to visualize geospatial data in form of maps, images etc.

Target Participants

The candidates who want to participate in the course should be a student of final year undergraduate course or postgraduate course (any year).Technical/Scientific Staff of Central/State Government/Faculty/researchers at university/institutions are also eligible to apply for this course. Applications of participants have to be duly sponsored by university/institute and forwarded through coordinators from respective centres. Users receiving programmes under CEC-UGC/ CIET networks can also participate. Institutions on high speed National Knowledge Network (NKN).

Course Study Material

Course study materials like lecture slides, video recorded lectures, open source software & handouts of demonstrations, etc. will be made available through e-class. Video lectures will also be uploaded on e-class (https://www.eclass.iirs.gov.in/login).

Course Fee

There is no course fee for attending this programme.

Course Registration

• Course updates and other details will be available on URL- **http://www.iirs.gov.in/Edusat-News/**

• To participate in this programme the interested organizations/ universities/ departments/ Institutes has to identify a coordinator at their end. The identified coordinator will register online his/her Institute as nodal center in IIRS website.

• All the participants have to register online through registration page by selecting his/her organization as nodal center.

Course Funding & Technical Support

The programme is sponsored by Indian Space Research Organisation, Department of Space, Government of India.

Programme Reception

Programme can be received through e-class platform of IIRS-ISRO using internet connectivity. No specific hardware/software required. However, it is recommended good internet connectivity at user end. To run the programme in class room, following hardware will be required:

- Desktop computer with web camera microphone and output speakers or laptop with microphone camera and output speaker.
- Large display screen/projector/TV.

Important links

Courses updates and other details will be available on URL – https://www.iirs.gov.in/EDUSAT-News

To participate in this programme the interested organisations/universities/departments/institutes have to identify coordinator at their end. The identified coordinator will register online his/her institute as nodal centre in IIRS website (https://elearning.iirs.gov.in/edusatregistration/coordinator)

All the participants have to register online through registration page by selecting his/her organization as nodal centre. https://elearning.iirs.gov.in/edusatregistration/student

Award of Certificate

Working Professionals and Students: Based on 70% attendance and 40% in the online examination

There are limited number of seats.
Registration will be done on first come first serve basis

Marathwada Mitramandal's
College of Commerce

202/A Deccan Gymkhana, Pune 411038
Affiliated to SPPU, Recognized by UGC Re-accreditated by NAAC 'A' Grade

Department of Computer Science

Learn

Using EDITIX

XML using Editix

Prof. Dr. S S Kolhatkar
Prof. Manjiri Deshmukh

Value Added Course Contents :

Introduction to XML
Writing XML using - Rules and Grammar
XML structure
Editix and creating a sample XML file
Understanding DTD
DTD - Rules and grammar
Creating a sample DTD file using Editix
XML Documents and Database
Understanding XSD
XSD - Rules and grammar
Creating a sample XSD file using Editix
Understanding FLWOR query
Writing FLWOR query
Case Study
Case Study

1

Earn practical IT knowledge through Value Added Course

2

15 hour FREE course through Google Meet Session

3

On successful completion, student will get e-certificate

Applicable to SY/TY BSc(CS) & BBA(CA) Students.
20 students in one batch.
First batch starts on 15th November 2021

Registration is compulsory for the online course
https://forms.gle/qMigvkGCdUXzkWFw6

This course is intended for enthusiastic students or hobbyists. With Arduino, one can get to know the basics of micro controllers and sensors very quickly and can start building prototypes with very little investment. This course is intended to make you comfortable in getting started with Arduino.

Fundamental of Arduino and Programming

Value Added Course

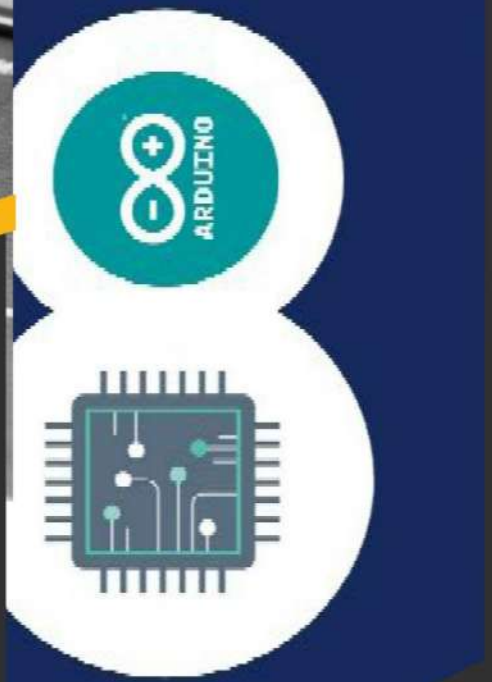
Marathwada Mitra Mandal College of Commerce,Decccan Pune
Computer Science department

ARDUINO

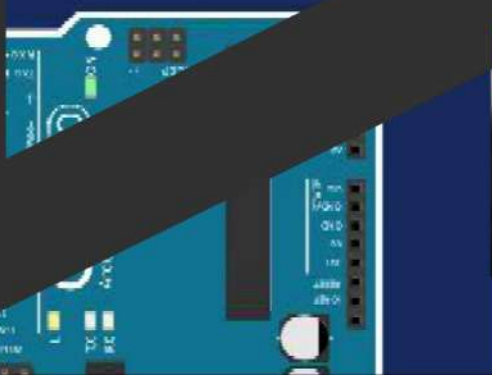
By,
Dr.Rajeshwari Birahdar
Swati Shelar

Registrations are invited for 15 hours free online course.

- **Course conduction online/offline (Demo)**
- **After completion of course students will get E- certificate**



BE BOLD AND IMAGINE,



Marathwada Mitra Mandal's College of Commerce

202/A Deccan Gymkhana Pune 411004
Affiliated to SPPU, Recognized by UGC, 2f and 12B, Re-acredited by NAAC

Department of Computer Science

VALUE ADDED COURSE

ESCALATE WITH EXCEL

LEARN TO : VISUALIZE, MANIPULATE, EVALUATE

TRAINERS: PROF. NIDHI SATAVLEKAR
PROF. SHUBHANGI MATHE

BATCH START DATE:13-DEC-2021

COURSE CONTENT

Introduction to Excel workbook,sheet, renaming sheet,
Insert row and columns,Address Bar, Fill Handle
Use of format painter in Excel
Formatting data as per number, text, currency, date values
Introduction to basic Functions ,Text Functions,Date and time function
Logical function,Using of Conditional Formatting
Creating an Excel Chart, Working with Excel Charts
Paste Special , pasting values and formulae
Analyze your data using techniques like filtering, sorting,advance Filters

TO BECOME A PRO IN HANDLING SPREADSHEETS, REGISTRATIONS ARE INVITED FOR 15 HOURS FREE ONLINE COURSE.
ONLINE PLATFORM:GOOGLE MEET
ON SUCCESSFUL COMPLETION STUDENT WILL GET E-CERTIFICATE
ENTRIES ARE INVITED FROM B.SC,BBA(CA),BBA,BBA(IB),B.COM

Registration Link https://forms.gle/q2PDpKAXBQZCtqyV6

Module- 3: Geographical Information System
Course Duration: **27-09-2021 to 22-10-2021**
Course Coordinator: Shri Prabhakar Alok Verma

Date	Day	Time	Topic	Speaker
27/09/2021	Monday	1500-1530 hrs	Course Inauguration	
		1600-1730 hrs	Introduction to GIS	Dr. Sameer Saran
28/09/2021	Tuesday	1600-1730 hrs	Geographic Phenomena, Concepts and examples	Mr. Prasun Kumar Gupta
29/09/2021	Wednesday	1600-1730 hrs	GIS Data Models (Spatial and Non spatial)	Mr. Ashutosh Kumar Jha
30/9/2021	Thursday	1600-1730 hrs	Data Inputting and Editing in GIS	Mr. K. Shiva Reddy
01/10/2021	Friday	1600-1730 hrs	Spatial Analysis – Introduction	Mr. Prabhakar Alok Verma
02/10/2021	Saturday			
03/10/2021	Sunday			
05/10/2021	Tuesday	1600-1730 hrs	Map Projection Concepts & Use in RS & GIS	Dr. Ashutosh
06/10/2021	Wednesday	1600-1730 hrs	Spatial Analysis (Vector & Raster)	Mr. Kapil Oberai
07/10/2021	Thursday	1600-1730 hrs	Open Source Software Technology & Tools	Mr. Prasun Kumar Gupta
08/10/2021	Friday	1600-1730 hrs	Overview of Spatial Data Quality	Mr. Prabhakar Alok Verma
09/10/2021	Saturday			
10/10/2021	Sunday			
11/10/2021	Monday	1600-1730 hrs	Uncertainty in GIS and Error Propagation	Mr. Prabhakar Alok Verma
12/10/2021	Tuesday	1600-1730 hrs	Map visualisation	Mr. Ashutosh Kumar Jha
13/10/2021	Wednesday	1600-1730 hrs	Demo visualisation	Mr. Ashutosh Kumar Jha
14/10/2021	Thursday	1600-1730 hrs	Network Analysis	Mr. Ashutosh Kumar Jha
15/10/2021	Friday	Holiday (Dussehra)		
16/10/2021	Saturday			
17/10/2021	Sunday			
18/10/2021	Monday	1600-1730 hrs	Overview of Machine Learning for GIS	Mr. Prabhakar Alok Verma
19/10/2021	Tuesday	Holiday (Milad-Un-Nabi)		
20/10/2021	Wednesday	1600-1730 hrs	Overview of Big Data Analytics	Mr. Kapil Oberai
21/10/2021	Thursday	1600-1730 hrs	Recent Trends in Geoinformatics	Dr. Sameer Saran
22/10/2021	Friday	1430-1530 hrs	**Query Session/ Feedback/ Valedictory**	

भारत सरकार Government of India
अंतररक्ष विभाग Department of Space
भारतीय अंतररक्ष अनुसन्धान संगठन Indian Space Research Organisation
भारतीय सुदूर संवेदन संस्थान , देहरादून Indian Institute of Remote Sensing, Dehradun

आईआईआरएस दूरस्थ अधिगम कार्यक्रम

सुदूर संवेदन एवं जीआईएस प्रौद्योगिकी के मूल सिद्धांत

पाठ्यक्रम की सारिणी

(प्रतिदिन दोपहर 11:00 से 12:30)

दिनांक	शीर्षक	वक्ता
सितंबर 14, 2021	भारतीय अंतरिक्ष कार्यक्रम और उसके अनुप्रयोगों का अवलोकन	डॉ॰ प्रकाश चौहान
सितंबर 15, 2021	सुदूर संवेदन तकनीक के मूलभूत सिद्धान्त	डॉ॰ मनु मेहता
सितंबर 16, 2021	भौगोलिक सूचना प्रणाली के मूलभूत सिद्धान्त	डॉ॰ समीर सरन
सितंबर 17, 2021	सुदूर संवेदन के प्लेटफॉर्म और सेंसर	श्री विनय कुमार
सितंबर 20, 2021	सुदूर संवेदन प्रौद्योगिकी में प्रमुख प्रवृत्तियां	डॉ ॰ शशि कुमार
सितंबर 21, 2021	सुदूर संवेदी उपग्रह चित्र से डिजिटल चित्र प्रसंस्करण और सूचना निष्कर्षण के मूलभूत सिद्धान्त	श्रीमति मीनाक्षी कुमार
सितंबर 22, 2021	ओपन सोर्स जीआईएस सॉफ्टवेयर में जियो-डेटा हैंडलिंग	श्री प्रसून कुमार गुप्ता
सितंबर 23, 2021	जीआईएस डेटा विश्लेषण का अवलोकन	श्री शिव रेड्डी
सितंबर 24, 2021	ऑनलाइन जियोडेटा रिपॉजिटरी और इसरो भुवन पोर्टल	श्री कमल पाण्डे
सितंबर 27, 2021	साइबर जीआईएस का अवलोकन	श्री धर्मेंद्र कुमार
सितंबर 28, 2021	भू-स्थानिक प्रौद्योगिकी का शासन में उपयोग	डॉ॰ हरीश कर्नाटक

पाठ्यक्रम का माध्यम: हिन्दी

(कमल पांडे)
पाठ्यक्रम संचालक

(डॉ॰ हरीश कर्नाटक)
प्रमुख, जिओवेब सर्विसेस आईटी एवं दूरस्थ अधिगम विभाग
आईआईआरएस, देहारादून

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Links for Add on/Certificate Programs Syllabus

Sr. No.	Course Name	Link to the syllabus
1	Communication Skills for Managers	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus%202019/Addon%20-%20SEC%20AECC%20%20BBA%20Programme%20CBCS%202019%20(3)_22.062020.pdf
2	Democracy and Election	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus2020/Democracy,%20Election%20and%20Governance%20Syllaus_22.09.2021.pdf
3	Basics of Environmental Awareness	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus%202019/Addon%20-%20SEC%20AECC%20%20BBA%20Programme%20CBCS%202019%20(3)_22.062020.pdf
4	Advanced Environmental Studies	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus%202019/Addon%20-%20SEC%20AECC%20%20BBA%20Programme%20CBCS%202019%20(3)_22.062020.pdf
5	Personality development and soft skills	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus%202019/Addon%20-%20SEC%20AECC%20%20BBA%20Programme%20CBCS%202019%20(3)_22.062020.pdf
6	Advanced C	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus%202019/Add%20on%20BBA-CA%20%20Course%20SEM%20II%20%20Advance%20C%20(1)_22.062020.pdf
7	Internet of Things (IoT)	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus2021/7)%20TYBBA(CA)_%20Syllabus%20of%20Sem%20V%20AND%20VI_08.07.2021.pdf

8	Soft Skills	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus2021/7%20TYBBA(CA)_%20Syllabus%20of%20Sem%20V%20AND%20VI_08.07.2021.pdf
9	Environmental Studies Sem III	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus2020/Environmental%20Studies%20Syllabus%20-%20for%20All%20Faculties_22.122020.pdf
10	Environmental Studies Sem IV	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus2020/Environmental%20Studies%20Syllabus%20-%20for%20All%20Faculties_22.122020.pdf
11	AECC - English Sem III	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus2020/S.Y.B.Sc-AECC-%20English%20Syllabus-%202%20Credits_21.012021.pdf
12	AECC - English Sem IV	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus2020/S.Y.B.Sc-AECC-%20English%20Syllabus-%202%20Credits_21.012021.pdf
13	Human Rights - I	http://www.unipune.ac.in/university_files/HRE-Syllabus-new.pdf
14	Introduction to Cyber Security	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus2021/Cyber%20Security_06012022.pdf?Mobile=1&Source=%2Fsites%2Fdocuments%2F%5Flayouts%2Fmobile%2Fdispform%2Easpx%3FList%3De863f80e%252D3186%252D47db%252D9e5d%252D75b1718a8bab%26View%3D62720b05%252D0c86%252D4245%252D9b8c%252D7dab74238a4e%26ID%3D205%26CurrentPage%3D1
15	Introduction to Constitution	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus2020/Introduction%20to%20Constitution_13.072020.pdf
16	Gender sensitivity	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus%202019/Value%20Added%20Courses%20F%20Y%20B%20Com%20CBCS%202019_28.082019.pdf
17	Democracy, Election and Governance	http://collegecirculars.unipune.ac.in/sites/documents/Syllabus2020/Democracy,%20Election%20and%20Governance%20Syllaus_22.09.2021.pdf