



University of Agricultural Sciences, Bangalore
Office of the Registrar, GKVK, Bengaluru-560 065
NAAC A⁺ Accredited



Dr. K.Madhusudan
Registrar

Mob: 94498 66901

Email: registrar@uasbangalore.edu.in

No. R/AC/ MOOC/2026-27

Date: 27.10.2026

Notification

Sub: Standardized procedure and details of suggested online platforms offering MOOC courses for UG degree programmes at UAS, Bangalore...reg.

- Ref:
1. University Notification No. R/AC/MOOC/2026-27 dated 18.08.2026 on the implementation of MOOC for all UG degree programmes at UAS, Bangalore.
 2. Email request from Dean (Agri.) Adichunchanagiri College of Agricultural Sciences, Mayasandra dated 28.09.2026
 3. Email request from Dean (Agri.) Sri. S. Kariappa College of Agriculture Kanakapura dated 29.09.2026
 4. Proceedings of the meeting held on 08.10.2026 under the Chairmanship of the Director of Education, UASB.
 5. Recommendations of the Director of Education, UASB, dt. 27.10.2026
 6. Approval of Hon'ble Vice-Chancellor, UASB, dt. 27.10.2026

Preamble

With reference to the subject cited above, and as per the recommendations of the ICAR VI Deans' Committee, Massive Open Online Courses (MOOC) are to be compulsorily completed by the undergraduate students of B.Sc. (Hons.) Agriculture, B.Sc. (Hons.) Agri-Business Management, B.Tech. (Agricultural Engineering), B.Sc. (Hons.) Food, Nutrition and Dietetics, B.Sc. (Hons.) Sericulture, B.Sc. (Hons.) Natural Farming, B.Sc. (Hons.) Forestry and B.Tech. (Biotechnology) degree programmes of the University. As per the University notification (vide ref. 1), the broad guidelines, pro-forma for registration and list of MOOC courses and platforms were notified in order to be implemented w.e.f. the academic year 2026-27, and students are required to complete the prescribed MOOC credit hours within the stipulated period (between V to VIII Semester).

In this regard, several queries and requests for clarification have been received from some of the colleges of UASB (vide ref. 2 & 3). To ensure that all students and College MOOC Coordinators follow a common, standardized procedure across the University, a meeting was held on 08.10.2026 at the Board Room, VI Floor, Naik Bhavan, GKVK, Bengaluru, with all the Deans, Special Officers and MOOC Coordinators of all the colleges of UAS, Bangalore, under the Chairmanship of the Hon'ble Vice-Chancellor, UASB (vide ref. 4). The queries relating to the method of credit calculation, simultaneous enrolment, free MOOCs, UGC/ICAR approved online platforms and MOOC courses, assessment and certification, credit documentation, course durations, completion and the role of MOOC Coordinators were discussed, and common guidelines and detailed list of suggested MOOC courses was finalized. Hence this notification is issued.

Notification

In accordance with the proceedings of the meeting held on 08.10.2026 under the Chairmanship of the Hon'ble Vice-Chancellor, UASB (vide ref. 4), the Deans and MOOC Coordinators of all the constituent and affiliated colleges of UASB are hereby instructed to adhere to the guidelines, without any deviation, and insist on appropriate MOOC courses for students of their respective colleges from the suggested list of MOOC courses for UG students and ensure implementation of MOOC w.e.f. the academic year 2026-27 which is as notified hereunder (Annexures I to VI) by superseding the earlier notification (vide ref. 1) issued in this regard.



REGISTRAR

27/10

Copy to:

1. Dean (Agri.), CoA, GKVK
2. Dean (Seri.), COS, Chintamani
3. Dean (Agri.), BSSKCA, Kanakapura
4. Dean (Agri.), ACAS, Turuvekere
5. Special Officer, CoAE, GKVK
6. Controller of Examinations, UEC, UAS Bangalore
7. Dr. K.S. Jagadish, Professor & Scientific Officer to Director of Education, UASB
8. Dr. Mahin Sharif, Assoc. Prof., Dept. of Ag. Economics, COA, GKVK
9. Dr. Rinku Verma, Assoc. Prof., Dept. of F&ES, COA, GKVK
10. Dr. Poornima R, Assoc. Prof., Dept. of Plant Biotechnology, CoA, GKVK
11. Dr. T. Nagaraja, Asst. Prof., Dept. of Ag. Entomology, COA, GKVK
12. Dr. Sowmya K.J., Asst. Prof., Dept. of SS & AC, COA, GKVK
13. Dr. Bhavya N., Asst. Prof., Dept. of SS & AC, COA, GKVK
14. Dr. Ranganath G., Asst. Prof., IABM, COA, GKVK
15. Dr. Arvind Yadav, Asst. Prof., COAE, GKVK
16. Dr. Krupashree R., Asst. Prof., Dept. of Agronomy, COA, GKVK
17. Dr. Sunitha A.B., Asst. Prof., Dept. of Agril. Extension, COS, Chintamani
18. Dr. Yeshika M.P., Asst. Prof., Dept. of Sericulture, COS, Chintamani
19. Dr. Anitha Raj N., Asst. Prof., Dept. of Agril. Extension, BSSKCA, Kanakapura
20. Dr. Kavyashree C., Asst. Prof., Dept. of Agril. Extension, ACAS, Turuvekere
21. Dr. Jadesha G., Asst. Professor & Scientific Officer to Dean (Agri.), CoA, GKVK

CS to the Secretary to the Hon'ble Vice-Chancellor, UASB for kind information.

UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE
College of Agriculture, GKVK, Bengaluru – 560065
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PROFORMA-I: Student Registration Form for MOOC

(To be submitted by the student before enrolling/starting the course)

Student Details

Student Details	
Name of the Student	
ID Number	
Degree Programme	
Year & Semester	
Course Details	
Title of the MOOC	
Offering Platform (e.g., NAARM, SWAYAM, NPTEL, Coursera)	
Host Institution/University	
Course Duration (Weeks/Months)	
Start Date & End Date	
Number of Credits	

Declaration by the Student:

I hereby declare that the above-mentioned MOOC is relevant to my degree programme and I will complete compulsorily required credits [10 for B.Sc.(Hons.) Agri./ B.Sc.(Hons.) Seri./ B.Sc.(Hons.) ABM / B.Sc.(Hons.) FND/B.Tech. (Biotech)/ B.Sc. Ag. (Hons.) Natural Farming/ B.Sc.(Hons.) Forestry and 6 for B.Tech. (Ag.Engg.)] as per the VI Dean Committee recommendations before the last working day of my VIII semester.

Date: _____

Signature of the Student

Recommendations & Approval:

**Recommended/Not
Recommended**

Scrutinized & Verified

Approved/Not Approved

**Signature of Counsellor
with date**

**Signature of MOOC
Coordinator with Date**

**Signature of Dean
with Date**

UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE
College of Agriculture, GKVK, Bengaluru – 560065
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PROFORMA-II: MOOC Completion Form

Student Details	
Particulars	Details
Name of the Student	
ID Number	
Degree Programme	
Completion Details	
Title of the completed MOOC	
Platform	
Date of Completion	
Credits Earned	
Grade/Percentage Obtained	
Enclosures	
<ul style="list-style-type: none"> • Attested copy of the Course Completion Certificate • Copy of the Approved Proforma-I 	

Declaration by the Student:

I hereby declare that the above-mentioned MOOC is relevant to my degree programme and I will complete compulsorily required credits [10 for B.Sc.(Hons.) Agri./ B.Sc.(Hons.) Seri./ B.Sc.(Hons.) ABM / B.Sc.(Hons.) FND/ B.Tech. (Biotech)/ B.Sc. Ag. (Hons.) Natural Farming/ B.Sc.(Hons.) Forestry and 6 for B.Tech. (Ag.Engg.)] as per the VI Dean Committee recommendations before the last working day of my VIII semester.

Date: _____

Signature of the Student

Verification & Record Entry:

Certificate Verified

Certificate Scrutinized

Approved/Not Approved

**Signature of Counsellor
with date**

**Signature of MOOC
Coordinator with Date**

**Signature of Dean
with Date**

Guidelines for implementation of Massive Open Online Courses (MOOC) for Undergraduate degree programmes at UASB as per ICAR VI Deans' Committee recommendations

1. MOOC Credit Requirement

As per the recommendations of the ICAR Sixth Deans' Committee, students of B.Sc. (Hons.) Agriculture, B.Sc. (Hons.) Agricultural Business Management (ABM), B.Sc. (Hons.) Sericulture, B.Sc. (Hons.) Food, Nutrition, Dietetics (FND), B.Sc. Ag. (Hons.) Natural Farming, B.Sc. (Hons.) Forestry and B.Tech. (Biotechnology) shall complete a minimum of ten (10) MOOC credits during the III and IV years of their degree programmes. Students of B.Tech. (Agricultural Engineering) shall complete a minimum of six (6) MOOC credits during the III and IV years of their degree programme.

Minimum credit value of a MOOC course to be registered shall be a minimum of 1 credit hour and a maximum of 4 credit hours at a time

2. Nomination of MOOC Coordinators

Each constituent and affiliated college of UAS Bangalore shall nominate faculty member(s) as MOOC Coordinator(s) for each undergraduate degree programme offered, as detailed below:

- B.Sc. (Hons.) Agriculture, GKVK: One MOOC Coordinator for each section.
- B.Sc. (Hons.) Agricultural Business Management (ABM): One MOOC Coordinator.
- B.Sc. (Hons.) Food, Nutrition and Dietetics (FND): One MOOC Coordinator.
- B.Tech. (Agricultural Engineering): One MOOC Coordinator.
- B.Sc. (Hons.) Sericulture: One MOOC Coordinator.
- B.Sc. Ag. (Hons.) Natural Farming: One MOOC Coordinator.
- B.Sc. (Hons.) Forestry: One MOOC Coordinator.
- B.Tech. (Biotechnology): One MOOC Coordinator.

The MOOC Coordinator shall facilitate student registration, monitor course completion, maintain programme-wise records, and coordinate with the Academic Unit for recording completed MOOCs.

NB: Offline courses that are routinely offered under the VI Deans' Committee syllabus shall be excluded from the indicative list.

3. Identification of MOOC Courses

The MOOC Coordinators shall compile and periodically update information on suitable MOOCs offered through recognized online learning platforms such as SWAYAM, NPTEL, mooKIT, edX, Coursera, or any other University-approved portal.

Students may enroll in MOOCs that are relevant to their academic or professional development, including courses offered in disciplines beyond their prescribed curriculum such as basic sciences, agricultural sciences, humanities, economics, management, communication skills, languages, music, computer applications, artificial intelligence, data science, entrepreneurship, and other interdisciplinary areas.

4. **Student Awareness and Guidance**

The Student Counsellors and MOOC Coordinators shall jointly sensitize, counsel, and guide students regarding the mandatory completion of the prescribed MOOC credits in accordance with the recommendations of the ICAR Sixth Deans' Committee. Orientation necessary in the first week of V Semester.

5. **Procedure for Registration and Completion of MOOCs**

The following procedure shall be followed for registration and completion of MOOCs:

- a. The student shall submit **Proforma-I** (enclosed as Annexure I) through the respective Student Counsellor seeking prior approval for enrolling in the proposed MOOC.
- b. The Student Counsellor shall scrutinize the application and forward it to the concerned MOOC Coordinator.
- c. The MOOC Coordinator shall examine the proposal and submit it to the concerned Dean/Special Officer for approval.
- d. Upon successful completion of the MOOC, the student shall submit **Proforma-II** (enclosed as Annexure II), along with the course completion certificate, through the same official channel.
- e. The concerned MOOC Coordinator shall verify the completion certificate and submit the details of the completed MOOC to the Dean/Special Officer for issuing necessary instructions to the Academic Unit for recording the course in the student's academic record.

6. **Timeline for Completion**

All prescribed MOOC credits shall be completed by the students on or before the last working day of the VIII Semester of their respective undergraduate degree programme.

7. **Academic Documentation**

All MOOC courses shall be treated as Non-Gradual courses. Separate completion certificates shall be issued by the respective MOOC provider.

Successfully completed MOOCs shall be recorded with the remark "Satisfactory (S)". The concerned Academic Unit of each college of UASB shall maintain the record of completed MOOCs and include the titles of the completed MOOC courses in the student's final transcript (OGPA Card). MOOC credit hours shall not be considered for the calculation of the Overall Grade Point Average (OGPA).

8. **Integration with UGAM Software**

The registration, approval, monitoring, completion, certification, and academic recording of MOOCs shall be mapped and integrated into the UGAM Software to facilitate efficient management and maintenance of student records.

9. Students must earn the prescribed MOOC credits as part of their academic requirements. These credits may come from one or more MOOCs.
10. Students can register for MOOCs only from the V semester onward, and must complete all the prescribed MOOC credits within the stipulated period (between V to VIII Semester).

11. Students should spread their MOOC credits across the semesters instead of postponing them until the end, which helps them complete the credits on time and prevents a backlog of pending credits before the VIII semester. The MOOC Coordinator shall advise the students on a suitable semester-wise distribution.
12. The concerned MOOC Coordinator shall guide the students in selecting MOOCs and in registration procedures, and shall monitor and support the students in completing the prescribed MOOC credits.
13. Students may select MOOCs of their choice from any discipline or interdisciplinary domain, subject to academic relevance and approval of the MOOC Coordinator, wherever required. Students shall be encouraged to choose courses that supplement their core discipline, enhance practical exposure and contribute to their professional development.
14. Registration and successful completion of the prescribed MOOC credits are mandatory for successful completion of the Undergraduate Programme. Failure to complete the prescribed credits shall render the student ineligible for processing of the semester grade cards/degree certificate until the requirement is fulfilled.
15. The detailed list of platforms and suggested courses including fee structure and other details is provided in the Annexure. However, the Deans are informed to once again carefully verify, through the concerned MOOC Coordinator/s, the course details, including duration, assessment mechanism, fee structure, credit equivalency, certification requirements, relevance to the student's academic progression, and recognition status before permitting students to register for such courses during the concerned semester.
16. Before registration, students shall verify the course content, duration, assessment mechanism, fee structure, credit equivalency, certification requirements, relevance to academic progress, and recognition status, as well as course eligibility, with the MOOC Coordinator/s, to avoid enrolment in non-eligible courses.
17. MOOCs shall be considered for credit transfer / equivalency only upon submission of a completion certificate, transcript, scorecard, grade report, details of contact hours, or other equivalent documentary evidence.
18. Credit equivalency norms: where the certificate does not explicitly indicate credits and only instructional duration is mentioned, the equivalency given in the table below shall be adopted.

Duration	Credit Equivalency	Reference for Credit Equivalency Norms
15 Hours of Theory	1 Credit	The guidelines on credit equivalency as per NEP 2020 (ref: point 4.9 of pg. no. 16 of VI Deans' Report and pg. no. 19-20 of National Credit Framework (NCrF), UGC, 2023)

As per UGC guideline, a 1- to 3- credit SWAYAM course is expected to be covered in 4-12 weeks' duration including the assessment component, in which it should be 40 hours for 3- credit courses to 80 hours for a 6-credit course for the learning from e-content, reading references material, discussion forum posting and assignment.

As per National Credit Framework (NCrF), UGC, 2023, Theory 1 Credit = 15 hours Practical 1 Credit = 30 hours Experiential learning including relevant experience and proficiency/ professional levels acquired 1 Credit = 40-45 hours

The online courses can be from any field such as Basic Sciences, Humanities, Psychology, Anthropology, Economics, Engineering, Business Management, Languages including foreign language, Communication skills/ Music, etc., and can be taken from NPTEL, mooKIT, edX, Coursera, SWAYAM or any other portal. The objective is to allow the students to groom their passion or strengthen their knowledge and competency in any field beyond prescribed courses.

19. After completion of a MOOC, the student shall submit the certificate issued by the concerned platform to the College MOOC Coordinator for verification. The MOOC Coordinator shall certify it, and a certified copy shall be sent to the Academic Unit of the concerned college for record purpose.
20. Credits earned through MOOCs shall be considered only after submission of the completion certificate, grade report, transcript, or equivalent documentary evidence to the Academic Unit.

21. Responsibilities of students

Students shall be responsible for:

- a. Selection of MOOCs
- b. Verification of course eligibility and credit equivalency
- c. Registration (as per University notification No. R/AC/MOOC/2026-27 dated 18.08.2026)
- d. Payment of applicable fees (course fee, exam fee, certificate fee etc.)
- e. Completion of assignments, where required as per course requirements
- f. Appearing for examinations (online / off-line, wherever applicable)
- g. Obtaining certificates
- h. Submission of certificates to the MOOC Coordinator for verification
- i. Submission of documentary evidence within the stipulated timelines to the Academic Unit of the concerned college.
- j. Students shall ensure that the fee details indicated in the Annexure are verified with the respective online platform before making any payment, as the fee structure is subject to revision from time to time.

22. Responsibilities of concerned colleges

- a. The Dean/Special Officer shall designate a faculty member as the College MOOC Coordinator.
- b. Colleges shall conduct suitable awareness and orientation programmes to familiarize students with approved platforms, registration procedures, timelines and credit requirements.

- c. The MOOC Coordinator shall provide necessary guidance for the following activities: selection of courses; registration; verification of certificate authenticity; assessment of credit equivalency; approval and recommendation of credits earned; and maintenance of records.
- d. After verification by the MOOC Coordinator, the certificate shall be submitted by the student to the Academic Unit for record maintenance and upkeep.
- e. Upon completion of the prescribed credits, the Dean/Special Officer shall issue a Consolidated Certificate of MOOC Credit Completion indicating: (i) Title(s) of MOOC(s); (ii) Platform(s) utilized; (iii) Duration and credit equivalency; (iv) Total credits earned; and (v) Signature of the Head of the concerned college (as per University notification No. R/AC/MOOC/2026-27 dated 18.08.2026).
- f. The Academic Section shall maintain semester-wise records of all MOOCs completed by students, including approvals, certificates, equivalency calculations and consolidated credits, for purposes of audit, accreditation, verification and future reference.

Coordinators nominated for implementation of MOOC courses (College wise & degree programme wise)

i) GKVK campus, Bengaluru

Sl. No.	Degree Programme	Programme Coordinators	Section
1.	B.Sc. (Hons.) Agriculture	Dr. Mahin Sharif, Assoc. Prof., Dept. of Ag. Economics, CoA, GKVK	A
		Dr. T. Nagaraja, Asst. Prof., Dept. of Ag. Entomology, CoA, GKVK	B
		Dr. Sowmya K J., Asst. Prof., Dept. of SS&T, CoA, GKVK	C
		Dr. Bhavya, N., Asst. Prof., Dept. of SS&AC, CoA, GKVK	D
2.	B.Sc. (Hons.) Agribusiness Management	Dr. Ranganath G, Asst. Prof., IABM, College of Agriculture, GKVK	--
3.	B.Sc. (Hons.) Food, Nutrition and Dietetics	Dr. Shobha D., Prof. Dept. of FSN, College of Agriculture, GKVK.	--
4.	B.Tech. Agricultural Engineering	Dr. Arvind Yadav, Asst. Prof., College of Agricultural Engineering, GKVK.	--
5.	B.Sc. (Hons.) Forestry	Dr. Rinku Verma, Assoc. Prof. Dept. of F&ES, CoA, GKVK	--
6.	B.Sc. Ag. (Hons.). (Natural Farming)	Dr. Krupashree, R., Asst. Prof. Dept. of Agronomy, CoA, GKVK	--
7.	B.Tech., Biotechnology	Dr. Poornima, R., Assoc. Prof. Dept. of Pl. Biotechnology, CoA, GKVK	--

ii) College of Sericulture, Chintamani

Sl. No.	Degree Programme	Programme Coordinators
1.	B.Sc. (Hons.) Agriculture	Dr. Sunitha A.B., Asst. Prof., Dept. of Agril. Extension, CoS, Chintamani
2.	B.Sc. (Hons.) Sericulture	Dr. Yeshika, M.P., Asst. Prof. Dept. of Sericulture, CoS, Chintamani

iii) Sri S. Kariyappa College of Agriculture, Kanakapura

Sl. No.	Degree Programme	Programme Coordinators
1.	B.Sc. (Hons.) Agriculture	Dr. Anitha Raj, N., Asst. Prof., Dept. of Agril. Extension, SSKCA, Kanakapura

iv) Adichunchanagiri College of Agriculture, Turuvekere

Sl. No.	Degree Programme	Programme Coordinators
1.	B.Sc. (Hons.) Agriculture	Dr. Kavyashree, C., Asst. Prof., Dept. of Agril. Extension, ACAS, Turuvekere

List of MOOC courses and various sources/web platforms offering MOOC courses that may be suitable/relevant for students pursuing UG degree programmes in all the constituent and affiliated colleges of UASB

List-A:

Online MOOC platforms:

- Coursera – Offers global agriculture, sustainability, and data science courses
- edX – University-level courses in food systems and environmental science
- SWAYAM – Free courses from Indian universities (ICAR, agricultural universities)
- NPTEL – Strong in science, biotech, and engineering foundations

1. Core Agriculture & Crop Science

- Introduction to Agronomy and Crop Production
- Soil Science and Soil Fertility Management
- Principles of Plant Physiology
- Pest Management and Integrated Pest Management (IPM)
- Organic Farming and Sustainable Agriculture

2. Modern & Technology-based Agriculture

- Precision Agriculture (GPS, drones, sensors)
- Agricultural Data Science and AI in Farming
- Remote Sensing and GIS in Agriculture
- Smart Farming and IoT in Agriculture

3. Food Science & Post-Harvest Technology

- Food Processing and Preservation
- Post-Harvest Management of Crops
- Food Safety and Quality Standards

4. Environment & Sustainability

- Climate Change and Agriculture
- Water Resource Management and Irrigation Techniques
- Sustainable Land Use and Agroecology

5. Agribusiness & Entrepreneurship

- Agricultural Marketing and Supply Chain Management
- Farm Business Management
- Entrepreneurship in Agriculture / Agri-startups

Suggested learning path

- Start with soil, crop science, and agronomy basics
- Move into IPM, irrigation, and farm management
- Then specialize in precision agriculture or agribusiness
- Add a data/tech course (GIS, AI, IoT) for modern career advantage

Here is a semester-wise MOOC plan for B.Sc. (Hons.) Agriculture students with specific free SWAYAM / NPTEL courses which the student can directly search and enroll. These are based on commonly available courses on SWAYAM and NPTEL aligned with ICAR syllabus structure:

Semester	Recommended SWAYAM/NPTEL Course	Relevance
Semester I	Agriculture – Crop Production Fundamentals	Introduction to crop production, agronomy, and farming systems. (Class Central)
	Soil Science and Technology	Basics of soil properties, soil health, and management. (Get Your Education)
	Soil Fertility and Fertilizers	Plant nutrition, nutrient management, and fertilizer use. (NPTEL Online Courses)
	Organic Farming for Sustainable Agricultural Production	Sustainable agriculture and organic crop production. (NPTEL Online Courses)
	Plant Pathology and Soil Health	Plant diseases, diagnosis, and management. (SWAYAM)
	Irrigation and Drainage	Water management and irrigation scheduling. (NPTEL Online Courses)
Semester II	Post-Harvest Operations and Processing of Fruits, Vegetables, Spices and Plantation Crop Products	Value addition and post-harvest technology. (Get Your Education)
	Organic Farming for Sustainable Agricultural Production (if not completed earlier)	Strengthens sustainable agriculture concepts. (NPTEL Online Courses)
	Crop Modeling and Simulation for Agricultural Production Management (CMSAM)	Decision support systems and crop prediction tools. (Class Central)
	Soil Fertility and Fertilizers (advanced revision)	Enhances nutrient management expertise. (NPTEL Online Courses)
Semester III	Machine Learning for Soil and Crop Management	Precision agriculture, AI, remote sensing, and digital agriculture. (NPTEL Online Courses)
	Irrigation and Drainage	Advanced water-resource management skills. (NPTEL Online Courses)
Semester IV	Machine Learning for Soil and Crop Management	Supports research projects and modern agriculture. (NPTEL Online Courses)
	Crop Modeling and Simulation for Agricultural Production Management	Useful for RAWE and research-oriented students. (Class Central)
	Any specialization course matching career goal (Organic Farming, Machine Learning, Crop Modeling, Soil Fertility)	Useful for placements, competitive exams, and higher studies. (NPTEL Online Courses)

Best MOOC Courses suited for B.Sc. (Hons.) Agriculture students

1. Machine Learning for Soil and Crop Management – Precision Agriculture & Agri-Tech jobs. (NPTEL Online Courses)
2. Crop Modelling and Simulation for Agricultural Production Management – Research and climate-smart agriculture. (<https://www.classcentral.com>)
3. Soil Fertility and Fertilizers – Soil testing and nutrient management industries.
4. Irrigation and Drainage – Water-resource and irrigation sectors.
5. Post-Harvest Operations and Processing – Food processing and value-addition industries.

NB: The above said plan balances core agriculture subjects, modern technologies, and industry-relevant skills throughout the four semesters (III and IV year of UG programme).

List B:

MOOC List of Courses offered for B.Tech. (Agri. Engg.) degree programme (6 Credit Hours)

Sl. No.	Course Name	Duration	Platform
1.	Thermal Operations in Food Process Engineering: Theory and Applications.	12 weeks	IIT Kharagpur via SWAYAM NPTEL
2.	Post Harvest Operations and Processing of Fruits, Vegetables, Spices and Plantation Crop Products	12 weeks	IIT Kharagpur via SWAYAM NPTEL
3.	ICT Basics	6 weeks	IIT Kharagpur via SWAYAM NPTEL
4.	Soil And Water Conservation Engineering	12 weeks	IIT Kharagpur via SWAYAM NPTEL
5.	Novel Technologies For Food Processing and Shelf Life Extension	12 weeks	IIT Kharagpur via SWAYAM NPTEL
6.	Traction Engineering	8 weeks	IIT Kharagpur via SWAYAM NPTEL
7.	Cooling Technology: Why and How utilized in Food Processing and allied Industries	12 weeks	IIT Kharagpur via SWAYAM NPTEL
8.	Watershed Hydrology	12 weeks	IIT Kharagpur via SWAYAM NPTEL
9.	Modern Food Packaging Technologies: Regulatory Aspects and Global Trends	12 weeks	IIT Kharagpur via SWAYAM NPTEL
10.	Design of Farm Machinery	12 weeks	IIT Kharagpur via SWAYAM NPTEL
11.	Precision Agriculture	8 weeks	IIT Kharagpur via SWAYAM NPTEL
12.	Irrigation and Drainage	12 weeks	IIT Kharagpur via SWAYAM NPTEL
13.	Fundamentals of Food Process Engineering	12 weeks	IIT Kharagpur via SWAYAM NPTEL
14.	Micro Irrigation Engineering	12 weeks	IIT Kharagpur via SWAYAM NPTEL
15.	Impact of Flow of Fluids in Food Processing and Preservation	12 weeks	IIT Kharagpur via SWAYAM NPTEL
16.	GIS in Ag-Essentials and Applications (GIS),	8 weeks	IIT Kanpur

Sl. No.	Course Name	Duration	Platform
17.	Introduction to Poultry Farming	12 weeks	IGNOU
18.	AI for Daily Productivity	4 weeks	IGNOU
19.	Advanced Machining Processes	8 weeks	IIT Guwahati
20.	Energy Resources and conversion processes	15 weeks	IGNOU
21.	Economic Viability of Indian Agriculture	6 weeks	AICTE
22.	Climate and Environmental Protection	15 weeks	UGC
23.	IoT Enabled Farming	4 weeks	EDUCBA by COURSERA
24.	Sustainable Agricultural Land Management	12 weeks	COURSERA
25.	Solid Waste Processing and Treatment	12 weeks	COURSERA

List C:

List of MOOC Courses under various Indian & International Platforms for Farm Sciences Under graduate students (Tentative list)

1. SWAYAM & NPTEL (Government of India Initiatives)

Course Name	Offering Host/Institute	Key Topics Covered
Organic Farming & Sustainable Agriculture	IIT Kharagpur (NPTEL)	Organic crop production, biological pest control, soil organic management, certification standard.
Farm Machinery & Automation	IIT Kharagpur (NPTEL)	Tractor power systems, precision tillage, sensors in agriculture, horticultural machinery.
GIS & Remote Sensing in Agriculture	IIRS / NPTEL	Satellite imagery, spatial analysis, crop health mapping, yield prediction.
Post-Harvest Management & Food Processing	IIT Kharagpur / CFTRI	Grain storage, cold chain logistics, minimal processing, value addition.
Soil and Water Conservation Engineering	IIT Kharagpur (NPTEL)	Watershed management, drip & sprinkler irrigation hydraulics, erosion control.

2. agMOOCs & mookIT (IIT Kanpur & Commonwealth of Learning)

Course Name	Offering Host/Institute	Key Focus Areas
Integrated Pest & Disease Management (IPM/IDM)	UAS Raichur & IIT Kanpur	Bio pesticides, vector surveillance, eco-friendly crop protection.
Fundamentals of ICT in Agriculture	IIT Kanpur	Ag-tech apps, mobile-based advisory tools, digital extension.
Agricultural Value Chain Management	IIM Calcutta & UAS Raichur	Farm supply chain, ag-logistics, market access for FPOs.
Weather Forecast & Agro-Advisories	IIT Kanpur & ICAR	Micro-climate monitoring, weather-based irrigation/spraying schedules.

3. Coursera (Global Universities & Companies)

Coursera offers industry-focused and multidisciplinary courses from global institutions (e.g., University of Illinois, UC Davis, Wageningen University).

Course Name	Offering Host/Institute	Key Focus Areas
Precision Agriculture	University of Nebraska–Lincoln	Covers GPS-guided tractors, variable rate technology (VRT), drone imaging, and yield monitoring
Bioinformatics & Plant Genomics	-	-
Agribusiness Management & Finance	-	-
Sustainable Agricultural Land Management	-	Focuses on nutrient cycling, soil health, and watershed preservation

4. edX (Global Academic Institutions)

Course Name	Offering Host/Institute	Key Focus Areas
Circular Agriculture & Food Systems	Wageningen University	Explores waste reduction, resource recovery, and sustainable livestock integration
Feed the World-Sustainable Food Systems	-	Covers climate-smart agriculture and food security economics
Gene Editing in Agriculture (CRISPR technology)	-	Modern plant biotechnology and trait improvement

List D:

SWAYAM & NPTEL:

Sl. No.	Course title	Offering Institute	Duration
1	Development Research Method	IIT Guwahati	8 weeks
2	Artificial Intelligence, law and justice	NALSAR University of Law	8 weeks
3	Engineering psychology	IIT Guwahati	8 weeks
4	Intellectual property rights and competition law	IIT Kharagpur	8 weeks
5	Environmental nano technology and application	IIT Kharagpur	8 weeks
6	Research writing	IIT Mandi	4 weeks
7	Development Research methods	IIT Guwahati	8 weeks
8	Research methodology in humanities and social sciences	IIT Roorkee	8 weeks
9	Mastering speaking and presentations	IIT Kharagpur	8 weeks
10	Developing soft skills and personality	IIT Kanpur	8 weeks
11	Principles of human resource management	IIT Kharagpur	8 weeks

Sl. No.	Course title	Offering Institute	Duration
12	Sociology and resource management	IIT Kharagpur	4 weeks
13	Business and sustainable development	IIT Bombay	4 weeks
14	Governance of Artificial Intelligence	NALSAR University of Law	8 weeks
16	Introduction to advanced cognitive processes	IIT Kanpur	8 weeks
17	Introduction to computer and network performance analysis	IIT Bombay	4 weeks
18	Moral thinking: An introduction to values and ethics	IIT Kanpur	4 weeks

NPTEL:

Sl. No.	Course title	Offering Institute	Duration
1	Waste water treatment and recycling	IIT Kanpur	12 weeks
2	Farm Machinery	IIT Kanpur	12 weeks
3	Artificial Intelligence, Data Science, Programming Robotics	IIT Madras	12 weeks
4	International Trade – Theory and Empirics	IIT Roorkee	12 weeks
5	Sociology of Development	IIT Guwahati	12 weeks

COURSERA:

Sl. No.	Course title	Offering Institute	Duration
1	Developing An Entrepreneurial. Mindset: First step towards Success.	Coursera	2 weeks
2	Social Media Advertising	Coursera	4 weeks
3	Introduction to CAD, CAM and Practical CNC Machining	Coursera	4 weeks

SWAYAM:

Sl. No.	Course title	Offering Institute	Duration
1	Advanced Organizational Behavior	INI, Banaras Hindu University	12 weeks
2	Soft Skills	IGNOU	12 weeks

EDX:

Sl. No.	Course title	Offering Institute	Duration
1	Image Processing and Analysis for life Scientist	EPFL	7 weeks
2	Digital Photography	University of Cape town	10 weeks
3	Accounting for Decision making	IIMB	7 weeks

UNIVERSITY OF AGRICULTURAL SCIENCES, BANGALORE
Suggested Online Courses for all the Under Graduate degree programmes (ICAR VI Deans' Committee)

S.No	Name of the Online Portal	Course Title (Suggested Courses for UG students)	Duration (Number of HOURS) as per the Brochure / portal information	Duration (in WEEKS) (numbers only) as per the Brochure / portal information	Credit points (Numbers only) as per the Brochure / portal information	Course Level (Should be minimum of UG level)	Cost for Exam & Certificate (if free, please mention) (Rs.)	Exam details	Whether the completion certificate will have CREDIT POINTS information (YES / NO)	CREDIT EQUIVALENCY as per NCrF (15 hrs of Theory = 1 credit; 30 hrs of Practical = 1 credit; 40 hrs of Theory=3 credits)
1.	Alison	Agricultural Science - Gardening, Animal farming and Aquaculture	13-15	1	1	UG	Free	Online	NO	1
2.	CABI	Improving crop nutritional practices	6-8 hours	-	1	UG	Free	Online	YES	1
3.	Cambridge university	Sustainable food production and processing	66	8	4	UG	Free	Online	Yes	4
4.	Coursera	Sustainable Agricultural Land Management	21	8	1	-	Free	Online	NO	1
5.	Coursera	Sustainable Food Systems	13	8	1	-	Free	Online	NO	1
6.	ANGRAU ODLIC	All courses	16	8 Weeks	1	UG	500	online	YES	1
7.	Coursera	Applying to US Universities	30	3	2	UG	Paid	Online	No	2
8.	Coursera	Food Sustainability, Mindful Eating, and Healthy Cooking Specialization	40	4	3	UG	Paid	Online	No	3
9.	Coursera	Successful Career Development	20	2	1	UG	Paid	Online	No	1
10.	Coursera	Plant Bioinformatic methods specialization	60	24 weeks	4	UG	Paid	Online	NO	4
11.	Coursera	Agribusiness and Sustainable food production economics specialization	60	24 weeks	4	UG	Paid	Online	NO	4
12.	Coursera	Agriculture, Economics and Nature	16	4 weeks	1	UG	Paid	Online	NO	1
13.	Coursera	Agroforestry Specialization	39	7 weeks	3	UG	Paid	Online	NO	3
14.	Coursera	Agroforestry Specialization	55	3-6 Months	3	UG	Paid	Online	No	3
15.	Coursera	Bugs 101: Insect-Human Interactions	26	10 weeks	1	UG	Paid	Online	No	1
16.	Coursera	ChatGPT: Master Free AI Tools to Supercharge Productivity Specialization	40	4	3	UG	Paid	Online	YES	3
17.	Coursera	Digital marketing revolution	19	4	1	UG	Paid	online	NO	1
18.	Coursera	Doing Economics: Measuring Climate Change	20	2	1	UG	Paid	online	NO	1
19.	Coursera	Edible Insects	19	6	1	UG	Paid	Online	No	1
20.	Coursera	Environmental Economics	24	8	1	UG and PG	Paid	Online	NO	1

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21.	Coursera	Environmental Science	16	4	1	UG	Paid	Online	No	1
22.	Coursera	Environmental Studies	80	2 months	5	UG	Paid	Online	No	5
23.	Coursera	GIS, Mapping, and Spatial Analysis Specialization	59 hours	2 months	3	UG	Paid	Online	No	3
24.	Coursera	Globalization, Economic Growth and Stability specialization	45 hours	5 months	2	UG/PG	Paid certificate	Online	NO	2
25.	Coursera	Improve your english communication skills	65 hours	6 months	4	-	Paid certificate	Online	NO	4
26.	Coursera	Innovation:From Creativity to Entrepreneurship Specialization	87 hours	7 months	5	UG	Paid certificate	Online	No	5
27.	Coursera	Introduction to Biology: Biodiversity	20 hours	2 weeks	1	UG	Paid certificate	Online	No	1
28.	Coursera	Introduction to Biology: Ecology	20 hours	2 weeks	1	UG	Paid certificate	Online	No	1
29.	Coursera	Introduction to Biology: Ecology, Evolution, & Biodiversity Specialization	57 hours	2 months	3	UG	Paid certificate	Online	No	3
30.	Coursera	Introduction to Environmental Science Specialization	70 hours	3 months	4	UG	Paid certificate	Online	No	4
31.	Coursera	Microeconomics principles	28	-	2	UG	Paid certificate	Online	NO	2
32.	Coursera	The Economics of Agro-Food Value Chains	35	4	3	UG	Fee for certificate	Online	YES	-
33.	EdX	Cell Physiology	5	3-5 h/week	2	UG	Free	Online	Yes	2
34.	ICAR	Post Harvest Technology	45	12	3	UG	Free	Online assessment	YES	-
35.	MOOC	Nutrition and Health-Micronutrients and Malnutrition	6 to8 hours/week	7 weeks	0	UG	Free	online	No	3
36.	NAARM	Agri Startup Ecosystem	45	12	3	UG	Free	Online assessment	YES	3
37.	NAARM	Agribusiness Innovation	45	12	3	UG	Free	Online assessment	YES	3
38.	Coursera/edX	AI for Agriculture	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
39.	Coursera/edX	Digital Transformation in Agribusiness	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
40.	Coursera/edX	Food Systems and Sustainability	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3

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41.	Coursera/edX	Introduction to Food and Health	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
42.	Coursera/edX	Blockchain for Food Traceability	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
43.	edex	Art of Persuasive Writing and Public Speaking	2-3 hours/week	8 weeks	1	UG	Fee for certificate	Online	yes	1
44.	Edx	Drones for agriculture	2-4 hrs	8 weeks	3	UG/PG	1200	Online	YES	3
45.	edX	E-learning on Digital Agriculture	15	5 weeks	3	UG	1500	Online	No	1
46.	EDX	Understanding Agribusiness, value chain and consumers Global Food System	4	2-3 hrs /week	2	UG	126.5 USD	Online	YES	2
47.	ICAR	Post Harvest Technology	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
48.	ICAR	Agri Value Chain Management	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
49.	ICAR	Food Processing Entrepreneurship	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
50.	ICAR	Integrated Farming Systems	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
51.	ICAR	Agri Supply Chain Digitization	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
52.	Mount Carmel College	MOOC on Organic Farming	98	14	7	UG	100	Online	NO	7
53.	NAARM	30 DAY INTERNATIONAL AGRICULTURE WINTER SCHOOL TRAINING CUM CERTIFICATE PROGRAMME	30 Hours	30 DAYS	2	UG	499	Online	YES	2
54.	NAARM	Agribusiness Innovation	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
55.	EdX	Sustainable Food Security: Food Access	42	6	0	UG	-	Online	NO	3
56.	EdX	Circular Business Models for Sustainable urban food Systems	6-10 hrs/week	6	3	UG	NO	online	YES	3
57.	edX	Food security and Sustainability	84	12	5	UG	-	Online	YES	5
58.	EDX	Nutrition and Health: Food Safety	6-8hrs /week	8 weeks	3	UG	-	Online	YES	3
59.	IGNOU	Basics of Event management	-	12	4	UG	-	Online	Yes	4

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60.	NIPHM	Biosecurity & Pest Surveillance	30-40 hrs	8-12 weeks	0	UG	free	Online	No	2
61.	NIPHM	Diploma in Sustainable Development	2-3 hrs	Self paced	1	UG	Free	Online	No	1
62.	NAARM	Agri Startup Ecosystem	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
63.	NAARM	Agri Export Management	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
64.	NAARM	Digital Agribusiness	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
65.	NAARM	Agri Entrepreneurship	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
66.	NPTEL	Farm machinery	30	12	4	UG	1000	Exam in Person at any of the designated centres	Yes	4
67.	NPTEL	Farming System & Sustainable Ag	30	12	3	UG	1000	In-person Proctored	YES	3
68.	NPTEL	Food Packaging Technology	45	8	3	UG/PG	1000	Proctored exam	YES	3
69.	NPTEL	Food Preservation and Processing	45	12	4	UG	1000	Proctored exam	YES	4
70.	NPTEL	Gender justice and workplace security	10	4	1	UG	1000	Exam in Person at any of the designated centres	Yes	1
71.	NPTEL	Indian Business history	40	8	2	UG	1000	Exam in Person at any of the designated centres	Yes	2
72.	NPTEL	Precision Agriculture	40	8	3	UG	1000	Exam in Person at any of the designated centres	Yes	3

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73.	NPTEL	Irrigation and Drianage Engineering	60	12	4	UG	1000	Exam in Person at any of the designated centres	Yes	4
74.	NPTEL	Leadership	15	4	1	UG	1000	Exam in Person at any of the designated centres	Yes	1
75.	NPTEL	Machine learning for soil and crop management	60	12	3	UG	1000	Exam in Person at any of the designated centres	Yes	3
76.	NPTEL	Micro-irrigation Engineering	30	12	3	UG	1000	In-person Proctored	YES	3
77.	NPTEL	Nanotechnology in Agriculture	40	8	3	UG	1000	Exam in Person at any of the designated centres	Yes	3
78.	NPTEL	Organic farming for sustainable Agriculture production	40	8	3	UG	1000	Online & Exam in Person at any of the designated centres	Yes	3
79.	NPTEL	Plant Pathology and Soil Health	30	12	4	UG	1000	In-person Proctored	YES	4
80.	NPTEL	Post harvest operations and processing of fruits, vegetables, spices and plantation crop products	60	12	4	UG	1000	Exam in Person at any of the designated centres	Yes	4
81.	NPTEL	Remote Sensing in Ag	30	12	3	UG	1000	Online & In-person Proctored	YES	3
82.	NPTEL	Robotics: Basics and Selected Advanced Concepts	42	12	3	UG/PG	1000	Offline exam	YES	3

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83.	NPTEL	Science of happiness and well being	40	8	3	UG/PG	1000	Exam in Person at any of the designated centres	Yes	3
84.	NPTEL	Soft skill development	40	8	3	UG	1000	Exam in Person at any of the designated centres	Yes	3
85.	NPTEL	Soil and water conservation engineering	60	12	4	UG	1000	Exam in Person at any of the designated centres	Yes	4
86.	NPTEL	Soil Fertility and Fertilizers	60	12	4	UG	1000	Online	Yes	4
87.	NPTEL	soil science and technology	60	12	4	UG	1000	Exam in Person at any of the designated centres	Yes	4
88.	NPTEL	Statistical Foundation for Big Data Analysis	60	12	4	UG	1000	Proctored Exam	YES	4
89.	NPTEL	Water shed management	40	8	2	UG	1000	Exam in Person at any of the designated centres	Yes	2
90.	NPTEL	Food Chemistry	45	12	3	UG	1000	Proctored exam	YES	3
91.	NPTEL	Food Product Development	45	12	3	UG	1000	Proctored exam	YES	3
92.	NPTEL	Food Biotechnology	45	12	3	UG	1000	Proctored exam	YES	3
93.	NPTEL	Fundamentals of Food Process Engineering	60	12	4	UG	1000	Proctored exam	YES	4
94.	NPTEL	Heat Transfer in Food Processing	45	12	3	UG	1000	Proctored exam	YES	3
95.	NPTEL	Mass Transfer in Food Processing	45	12	3	UG	1000	Proctored exam	YES	3

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96.	NPTEL	Thermal Processing of Foods	31	12	3	UG	1000	Proctored exam	YES	3
97.	NPTEL	Food Refrigeration and Cold Chain	45	12	3	UG	1000	Proctored exam	YES	3
98.	NPTEL	Unit Operations in Food Processing	45	12	3	UG	1000	Proctored exam	YES	3
99.	NPTEL	Food Plant Design and Layout	45	12	3	UG	1000	Proctored exam	YES	3
100.	NPTEL	ISO 22000 Food Safety Systems	45	12	3	UG	1000	Proctored exam	YES	3
101.	NPTEL	Food Laws and Regulations	45	12	3	UG	1000	Proctored exam	YES	3
102.	NPTEL	Food Quality Assurance	45	12	3	UG	1000	Proctored exam	YES	3
103.	NPTEL	Introduction to Machine Learning	45	12	4	UG	1000	Proctored exam	YES	4
104.	NPTEL	Computer Vision for Food Quality Detection	45	12	3	UG	1000	Proctored exam	YES	3
105.	NPTEL	AI for Food Quality Inspection	45	12	3	UG	1000	Proctored exam	YES	3
106.	NPTEL	Food Supply Chain Analytics	45	12	3	UG	1000	Proctored exam	YES	3
107.	NPTEL	Global Food Logistics	45	12	3	UG	1000	Proctored exam	YES	3
108.	NPTEL	Sustainable Food Systems	45	12	3	UG	1000	Proctored exam	YES	3
109.	NPTEL	Climate Change and Food Security	45	12	3	UG	1000	Proctored exam	YES	3
110.	NPTEL	Circular Economy for Food Systems	45	12	3	UG	1000	Proctored exam	YES	3
111.	NPTEL	Agricultural Meteorology	30	12	3	UG	1000	In-person Proctored	YES	3
112.	Shiksha	E-Learning on Digital Agriculture	15 hrs	5 weeks	-	UG	Free	-	-	1
113.	NPTEL	Agri-Entrepreneurship	30	12	3	UG	1000	In-person Proctored	YES	3
114.	NPTEL	Artificial Intelligence for Management	60	12	3	UG	1000	Proctored Exam	YES	3

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115.	NPTEL	Basic Crop production	40	8	3	UG	1000	Exam in Person at any of the designated centres	Yes	3
116.	NPTEL	Biostatistics for Agriculture	30	12	3	UG	1000	In-person Proctored	YES	3
117.	NPTEL	Commercial Floriculture	30	12	3	UG	1000	In-person Proctored	YES	3
118.	NPTEL	Design of farm machinery	30	8	2	UG	1000	Exam in Person at any of the designated centres	Yes	2
119.	NPTEL	Digital soil mapping	40	8	3	UG	1000	Exam in Person at any of the designated centres	Yes	3
120.	NPTEL	Dryland Agriculture	20	8	2	UG	1000	In-person Proctored	YES	2
121.	NPTEL	Emotional intelligence	40	8	2	UG	1000	Exam in Person at any of the designated centres	Yes	2
122.	NPTEL	Environment science	50	12	3	UG	1000	Exam in Person at any of the designated centres	Yes	3
123.	NPTEL	Environmental Science in Ag.	30	12	3	UG	1000	In-person Proctored	YES	3
124.	NPTEL	Food Waste Management	45	12	3	UG	1000	Proctored exam	YES	3
125.	NPTEL (SWAYAM)	Basic Crop Production Practices	30	8	2	UG	1000	75% of Exam score & 25% Assignment score	YES	2
126.	NPTEL (SWAYAM)	Remote Sensing & GIS	40	8	3	UG	1000	Assignment + exam	YES	3

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127.	NPTEL (SWAYAM)	Integrated Pest Management	30	8	2	UG	1000	Assignment + exam	YES	2
128.	NPTEL (SWAYAM)	Irrigation and Drainage	45	12	4	UG	1000	Assignment + final exam	YES	4
129.	NPTEL (SWAYAM)	Natural Resources Management	45	12	3	UG	1000	Weekly assignment + exam	YES	3
130.	NPTEL (SWAYAM)	Organic Farming for Sustainable Agriculture	30	8	2	UG	1000	Assignment + exam	YES	2
131.	NPTEL/Swayam	Nanotechnology in Agriculture	30-40	8 Weeks	2	UG	1000	Online	Yes	2
132.	SWAYAM	Precision Agriculture	30	12	3	UG	1000	In-person Proctored	YES	3
133.	SWAYAM	PRINCIPLES OF GENETICS	90	12 weeks	4	UG	1000	Online	YES	4
134.	SWAYAM	Psychology of Personality and Individual Differences: Theory and Applications	36	12 weeks	3	UG	1000	Online	No	6
135.	SWAYAM	Remote Sensing and GIS for rural development	36	8 weeks	3	UG/PG	1000	In person	No	3
136.	SWAYAM	Soil Fertility and Fertilizers	40 hrs	12 weeks	4	UG	1,000	In person	No	4
137.	SWAYAM	Soil Science and Technology	75	12 weeks	3	UG	1000	Online	YES	3
138.	SWAYAM	Technology Transfer Through Joint Venture	120	4 weeks	1	UG	1000	Online	No	1
139.	SWAYAM	Traction Engineering	90	8 weeks	2	UG/PG	1000	Online	YES	3
140.	SWAYAM	Understanding Incubation and Entrepreneurship	36	12 weeks	4	UG	1000	In-person Proctored	No	4
141.	SWAYAM	Vegetable Science	30	12	3	UG	1000	In-person Proctored	YES	3
142.	SWAYAM	Water Resource & Watershed Management	45	15 weeks	4	UG	1000	Online	No	4
143.	SWAYAM	Agribusiness Management	45	12	3	UG	Free	Online assessment	YES	3
144.	Swayam	Business communication	40	8	4	UG	750	Exam in Person at any of the designated centres	Yes	4

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145.	SWAYAM	Psychology of personlity and individual differences : Theory and Applications	40	12	3	UG	1000	Exam in Person at any of the designated centres	YES	3
146.	SWAYAM	Dairy Processing and Technology	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
147.	SWAYAM	Meat and Poultry Processing	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
148.	SWAYAM	Cereal Processing Technology	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
149.	SWAYAM	Drying and Dehydration Technology	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
150.	SWAYAM	HACCP Principles and Implementation	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
151.	SWAYAM	Artificial Intelligence Foundations	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
152.	SWAYAM	Data Mining	43	8	4	UG	Free / Nominal exam fee	Online assessment	YES	4
153.	SWAYAM	Deep Learning Fundamentals	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
154.	SWAYAM	Agribusiness Management	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
155.	SWAYAM	Agricultural Marketing	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
156.	SWAYAM	Supply Chain Management	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
157.	SWAYAM	Farm Business Management	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
158.	SWAYAM	Environmental Impact Assessment	60	12	4	UG	Free / Nominal exam fee	Online assessment	YES	4
159.	SWAYAM	Plant Groups	85	15 weeks	3	UG	100	Online	YES	3
160.	SWAYAM	Agricultural economics	40	8	3	UG	750	Online	Yes	3
161.	Swayam	Basic Agronomic Practices	40	8	3	UG	750	Online	Yes	3
162.	SWAYAM	Crop Improvement of Kharif Crops	30	4	1	UG	750	Online	YES	1

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163.	SWAYAM	Food microbiology	40	12	3	UG	750	Exam in Person at any of the designated centres	Yes	3
164.	Swayam	Indian Agricultural Development	50	12	4	UG	750	Exam in Person at any of the designated centres	Yes	4
165.	Swayam	Introduction to psychology	40	8	4	UG	750	Exam in Person at any of the designated centres	Yes	4
166.	Swayam	Organic farming practices and certification	40	8	2	UG	750	Exam in Person at any of the designated centres	Yes	2
167.	Swayam	Personality development	40	8	3	UG	750	Exam in Person at any of the designated centres	Yes	3
168.	Swayam	Post harvest management of fruits and vegetables	50	12	4	UG	750	Exam in Person at any of the designated centres	Yes	4
169.	SWAYAM	Agri-Business Finance	30	12	3	UG	1000	In-person Proctored	YES	3
170.	SWAYAM	Agribusiness Management	30	12	3	UG	1000	Online Proctored	YES	3
171.	SWAYAM	Agricultural Extension and Rural Development	60 hrs	12-16 weeks	4	UG	1000	online	Yes	4
172.	SWAYAM	Agricultural Marketing	30	12	3	UG	1000	Online Quiz	YES	3
173.	SWAYAM	Agricultural Policy: Formulation, Components, Process, Implementation and Comparative Analysis	45	15 weeks	0	UG	1000	Online	No	4
174.	SWAYAM	Agro-informatics	20	8	2	UG	1000	Online Proctored	YES	-

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175.	SWAYAM	AI in Digital and Social Media Marketing	105	6 Weeks	0	UG	1000	Online	No	3
176.	Swayam	Applied Entomology	30-36	12 Weeks	2	UG	1000	Online	Yes	2
177.	Swayam	Basics of Biology	35-45	12	3	UG	1000	75% of Exam score & 25% Assignment score	YES	3
178.	SWAYAM	Basics of Crop Breeding and Plant Biotechnology	60	12	3	UG	1,000	Online	YES	3
179.	SWAYAM	Bee Keeping and Management	20	8	2	UG	1000	In-person Proctored	YES	2
180.	SWAYAM	BEGE-145: Soft Skills	60	12	4	UG	1000	Exam in Person at any of the designated centres	Yes	4
181.	SWAYAM	Biological data analysis and visualization with R	30	8	2	UG & PG	1000	Exam in Person at any of the designated centres	YES	2
182.	SWAYAM	Biological process design for wastewater treatment	30	8	2	UG/PG	1000	Exam in Person at any of the designated centres	YES	2
183.	Swayam	Biomolecular spectroscopy	30	8	2	UG/PG/PhD	1000	75% of Exam score & 25% Assignment score	YES	2
184.	SWAYAM	Cell Biology: Cellular Organization, Division and Processes	30	8	2	UG	1000	Exam in Person at any of the designated centres	YES	2
185.	SWAYAM	Climate and Environmental Protection	60	15 weeks	4	UG	1000	Online	No	4
186.	SWAYAM	Climate Change Science	45	12	3	UG/PG	1000	Exam in Person at any of the designated centres	YES	3

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187.	SWAYAM	Complete guide for campus interviews: Step by step preparation for Internships and Full-time jobs	15	4	1	UG	1000	Exam in Person at any of the designated centres	YES	1
188.	Swayam	Computational genomics	45	6	3	UG/PG/PhD	1000	75% of Exam score & 25% Assignment score	YES	3
189.	SWAYAM	Consumer Buyer Behaviour	120	12 weeks	3	UG	1000	Online	No	3
190.	SWAYAM	Cooling Technology: Why and How utilized in Food Processing and allied Industries	45	12	3	UG/PG	1000	Exam in Person at any of the designated centres	YES	3
191.	SWAYAM	CROP IMPROVEMENT OF KHARIF CROPS	75	4 weeks	1	UG	1000	Online	YES	2
192.	SWAYAM	Design of Farm Machinery	45	12 weeks	3	UG/PG	1000	Online	YES	3
193.	SWAYAM	Digital Literacy	30	7	1	UG/PG	1000	Online / Proctored Exam	Yes	1
194.	SWAYAM	Diseases of horticultural crops and management	30-36	8 Weeks	3	UG	1000	Online	YES	3
195.	SWAYAM	Effective Writing	45	9	3	UG	1000	Exam in Person at any of the designated centres	YES	3
196.	SWAYAM	Emotional Intelligence	30	8	2	UG	1000	Exam in Person at any of the designated centres	YES	2
197.	SWAYAM	English Language for Competitive Exams	45	12	3	UG	1000	Exam in Person at any of the designated centres	YES	3

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198.	SWAYAM	Environmental Geosciences	45	12	3	UG	1000	Exam in Person at any of the designated centres	Yes	3
199.	SWAYAM	Environmental Impact Assessment	45	12	3	UG/PG	1000	Exam in Person at any of the designated centres	YES	3
200.	SWAYAM	Environmental Quality Monitoring & Analysis	45	12	3	UG	1000	Exam in Person at any of the designated centres	Yes	3
201.	Swayam	Environmental Science	45	12	3	UG	1000	Online	Yes	3
202.	SWAYAM	Extension Methodologies	30	12	3	UG	1000	In-person Proctored	YES	-
203.	Swayam	Food preservation and technology	60	12	4	UG	1000	75% of Exam score & 25% Assignment score	YES	4
204.	Swayam	Food Science and Technology	45	12	3	UG	1000	75% of Exam score & 25% Assignment score	YES	3
205.	SWAYAM	Fundamentals of Ecology	45	12	3	UG & PG	1000	Exam in Person at any of the designated centres	YES	3
206.	SWAYAM	Cytogenetics	60	12 weeks	4	UG	Free	Online	YES	4
207.	Swayam	Drupal :Content Management system	3-4 hrs per week	12 weeks	3	UG	Free	online	yes	3
208.	Swayam	Moodle Learning Management System	4-5 hrs per week	15 weeks	2	UG	Free	online	yes	2
209.	SWAYAM	Principles of Genetics	60	12	4	UG	Free	Online	YES	4

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210.	SWAYAM	Fundamentals of Ecosystem Health and assessment	30	8	2	UG & PG	1000	Exam in Person at any of the designated centres	YES	2
211.	Swayam	Fundamentals of Spectroscopy	45	12	3	UG	1000	75% of Exam score & 25% Assignment score	YES	3
212.	SWAYAM	Impact of Flow of Fluids in Food Processing and Preservation	45	12	3	UG	1000	Exam in Person at any of the designated centres	YES	3
213.	SWAYAM	Indian Economy: Some Contemporary Perspectives	45	8	2	UG	1000	Exam in Person at any of the designated centres	YES	2
214.	SWAYAM	Interior Design	30	8	2	UG	1000	Exam in Person at any of the designated centres	Yes	2
215.	SWAYAM	Introduction on Intellectual Property to Engineers and Technologists	30	8	2	UG	1000	Exam in Person at any of the designated centres	YES	2
216.	SWAYAM	Introduction to Environmental Economics	45	12	3	UG	1000	Exam in Person at any of the designated centres	Yes	3
217.	SWAYAM	Introduction to Statistics	45	12	3	UG	1000	Exam in Person at any of the designated centres	YES	3
218.	SWAYAM	Irrigation and Drainage	30	12	3	UG	1000	In-person Proctored	YES	-

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219.	SWAYAM	Machine Learning For Soil And Crop Management	60	12	4	UG	1000	Exam in Person at any of the designated centres	Yes	4
220.	SWAYAM	Medicinal and Aromatic Plants	20	8	2	UG	1000	Online Quiz	YES	-
221.	SWAYAM	Modern Food Packaging Technologies: Regulatory Aspects and Global Trends	75	12 weeks	3	UG/PG	1000	Online	YES	3
222.	SWAYAM	Non-conventional Energy Resources	45	12	3	UG	1000	Exam in Person at any of the designated centres	YES	3
223.	Swayam	Novel Technologies for Food Processing and Shelf Life Extension	75	12 weeks	3	UG/PG	1000	Online	YES	3
224.	Swayam	Nutritional and clinical biochemistry	75	15	5	UG	1000	-	YES	5
225.	SWAYAM	Online Communication in the Digital Age	45	12	3	UG	1000	Exam in Person at any of the designated centres	YES	3
226.	SWAYAM	Organic Farming for Sustainable Agricultural production	24	8	2	UG	1000	In-person Proctored	YES	2
227.	SWAYAM	Patent Drafting for Beginners	15	4	1	UG	1000	Exam in Person at any of the designated centres	YES	1
228.	SWAYAM	Plant Cell Bioprocessing	30	8	2	UG	1,000	Online	YES	2
229.	Swayam	Plant Physiology and Metabolism	60	8 Weeks	4	UG	1000	Online	Yes	4
230.	SWAYAM (CEC)	Biostatistics and Mathematical Biology	45	12	3	UG	1000	Weekly tests + Exam	YES	3
231.	SWAYAM (CEC)	Climate and environment protection	30	15	2	UG	1000	Assignment + Final exam	YES	2
232.	SWAYAM (CEC)	Research Methodology	30	15	2	UG	1000	Assignment + exam	YES	2
233.	Swayam-Shiksha Online	Introduction to Machine learning	3-4 hrs per week	12 weeks	3	UG/PG	Free	online	yes	3

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234.	SWAYAM Plus	Climate Smart Agriculture	40	6	1	UG	1000	Online Quiz/Peer	YES	1
235.	Swayam Plus	Applied Entrepreneurship: Turning Ideas into Reality	not mentioned	30 hrs	2	UG	1160	online	yes	2
236.	Swayam Plus	Sustainable Living – Introduction to Environmental Studies	not mentioned	30hrs	2	UG	1160	online	yes	2
237.	SWAYAM Plus	AI for Agriculture	32	4	1	UG	500-1000	Online Quiz/Peer	YES	1
238.	SWAYAM-NPTEL	Data Analytics with Python	45	12	3	UG	Free / Nominal exam fee	Online assessment	YES	3
239.	SWAYAM-NPTEL	Water Quality Management Practices	60	12	4	UG	Free / Nominal exam fee	Online assessment	YES	4
240.	Swayam-Shiksha Online	Advanced Certification in Professional and Communicative English Skills	not mentioned	45 HRS	2	UG	472	online	yes	2
241.	Swayam-Shiksha Online	English Communication Skills	not mentioned	6 weeks	2	UG/PG	500	online	yes	2
242.	Swayam-Shiksha Online	Soft Skills and Employability	not mentioned	45 HRS	2	UG	1250	online	yes	2
243.	Swayam-Shiksha Online	Advanced Excel, SQL & Data Skills: Organize & Analyze Your Data.	not mentioned	45 HRS	2	UG	1740	online	yes	2
244.	Swayam-Shiksha Online	AI / ML using Python	not mentioned	36 hrs	2	UG	2000	online	yes	2
245.	TNAU	Organic inputs	80	2 months	2	UG	3000	Online	No	4
246.	TNAU	Vermi Composting	80	2 months	2	UG	3000	Online	No	4
247.	UDEMY	Modren irrigation techniques	10	2 weeks	1	UG	499	Online	No	1