

VIGNAN INSTITUTE OF AGRICULTURE AND TECHNOLOGY

Date: 15.02.2025

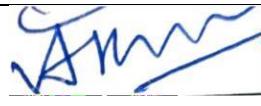
Minutes of Board of Studies Meeting

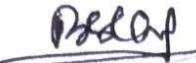
The Seventh Board of Studies (BoS) meeting for the B.Sc. (Hons.) Agriculture Program was held on February 15, 2025, from 09:30 am to 05:30 pm. The meeting was conducted in physical mode, all the participants attended in person at the Board Room, fifth floor of A Block, VFSTR. The event was presided over by Prof. T. Ramesh Babu, Chairperson of the Board of Studies, Vignan Institute of Agriculture and Technology (VIAT), VFSTR. ICAR has communicated the reconstruction of 6th Deans' committee report with the revised curriculum of B.Sc. (Hons.) Agriculture in tune with NEP 2020 and directed all SAUs, CAUs, DUs and Agricultural Colleges to adopt from the academic year 2024-25. Hence, the following agenda were discussed in the 7th BoS meeting of VIAT.

Agenda of the BoS Meeting:

1. Implementation of B.Sc. (Hons.) Agriculture Programme syllabus as per ICAR 6th Deans' committee report in tune with NEP2020 for second, third and final year.
2. Implementation of R-25 Regulations of VFSTR: Assessment.
3. Commencement of M.Sc. (Ag.) Programme in proposed disciplines from the Academic Year 2025-26.

The following members were present either thorough offline or online.

Sl. No.	Name	Designation of the Member	Position	Signature
1	Dr. T. Ramesh Babu	Dean, VIAT	Chairman	
2	Dr. K.P.C. Rao	Honorary Fellow (Retd.), ICRISAT, Hyderabad	External member (Research)	
3	Dr. T. V. Satyanarayana	Registrar, MNR University, Hyderabad	External member (Academia)	
4	Dr. Arvind Kumar	Former DDG-R, ICRISAT Vice President Prasad Seeds, Hyderabad	External member (Industry)	
5	Dr. S. V. Phanikumar	HoD, Department of Computer Sciences	Internal member	_____

6	Dr. Namana Seshagiri Rao	HoD, Department of Mathematics and Statistics	Internal member	_____
7	Dr. Rajanand Hiremath	Assistant Professor, Agronomy, BoA, VIAT	Internal member	
8	Dr. M. L. N. Nandini	Assistant Professor, Plant Pathology, BoE, VIAT	Internal member	
9	Dr. B. Srinivasulu (In place of Dr. U. Pandu)	Assistant Professor, Horticulture, I/C BoR, VIAT	Internal member	
10	Dr. Mahesh Hadole (In place of Dr. T. Prabhakara Rao)	Assistant Professor, Coordinator, Department of AE	Internal member	
11	Dr. Y. Vara Prasad	Assistant Director, VIAT	Internal member	
12	Dr. M. Chandra Surya Rao (In place of Dr. T. Naresh)	Assistant Professor, Horticulture, Farm Superintendent, VIAT	Internal member and I/C Member Secretary	

The following members have taken leave of absence:

1. Dr. U. Pandu
2. Dr. T. Naresh

Dr. Rajanand Hiremath, Member, Board of Academics (BoA), Vignan Institute of Agriculture and Technology welcomed the external and internal members of Board of Studies (BoS) who were experts from the research, industry and academia. As Chairperson, Dr. T. Ramesh Babu extended a warm welcome to all members of BoS. He expressed his sincere congratulations to all the participants for their commendable efforts in ensuring a robust turnout and recognized the significant value of their collective presence.

The following points were discussed in the BoS meeting:

Prof. T. Ramesh Babu delivered a brief presentation detailing the teaching, research and extension activities undertaken by the Vignan Institute of Agriculture and Technology (VIAT). He also discussed the actions initiated based on the outcomes of the 6th Board of Studies meeting. He

also underscored the significance of the occasion and delivered a detailed presentation outlining the following:

The existing programme structures, course syllabi, teaching, evaluation and methodology were highlighted. Furthermore, the key points of ICAR 6th Deans' Committee report including the guidelines developed as per NEP-2020 on Implementation Strategy for National Education Policy-2020 in Agricultural Education system, the eligibility and mode of admission criteria, institutional flexibility, lateral entry requirements, migration policy, maximum residential period for B.Sc. (Hons.) Agriculture programme were discussed.

In response to the NEP-2020's call to increase the Gross Enrolment Ratio (GER) in agriculture, provisions for launching stand-alone UG-Certificate and UG-Diploma courses in specific subjects or disciplines are recommended. The importance of maintaining each student's Academic Bank of Credits (ABC) is emphasized, in accordance with Higher Agricultural Education Institutions (HAEIs) and NEP-2020 guidelines. The significance of four key paths of knowledge; learning, skills, values and ethics are highlighted in the 6th Deans' Committee report according to which, it is proposed that the B.Sc. (Hons.) Agriculture program consists of 177 credits of which 167 are provided by the parent university and 10 are earned through online courses selected by the student in consultation with the university or HAEIs. In addition to this, new courses like Natural Farming and Agribusiness Management are introduced in B.Sc. (Hons.) Agriculture programme.

The Dean (SAFT) also addressed the salient features and the entry and exit options in B.Sc. (Hons.) Agriculture programme as per ICAR 6th Deans' Committee report, with emphasize on credit distribution. Key components include the Deeksharambh Foundation Course (2 weeks, non-gradial), core courses (major, minor, and 20 elective credits), Multi-Disciplinary Courses (9 credits), Value Added Courses (6 credits), Ability Enhancement Courses (8 credits), Skill Enhancement Courses (12 credits), the Students READY program (20 credits), Remedial Courses in Mathematics (1 credit) which is approved as gradial during 6th BoS meeting, non-gradial a 2-week study tour (2 credits), and 10 credits of online courses. Concise details of elective and skill enhancement courses were also presented. Further, discussion covered the uniform examination and evaluation system with a standardized grading process, followed by an overview of semester-wise course, credit allocation and department-wise credits distribution.

He also pointed out that at present three additional courses each with 2(1+1) credit hours related to IoT are being offered at VIAT, VFSTR *viz.*, Python Programming, Machine Learning and Statistical Methods with Data Visualization. In this regard, he pointed a single course which is also

approved in 6th BoS meeting 'Machine Learning through Python' as 3(2 + 1) credits to offer it in second semester of second year which combines the syllabus of all the three existing courses. Further, he also enlightened semester wise courses and credits allocation followed by department wise courses and credits distribution. Furthermore, he also pointed the need of finalization two skill enhancement courses for second year from the proposed courses *i.e.*, Production Technology of Bioagents, Seed Production and Testing Technology, Beneficial Insect Farming, Poultry Production Technology, Commercial Horticulture and Floriculture and Landscaping. Later, he also presented the assessment pattern (both formative and summative) of implementation of R-25 Regulations of VFSTR from the academic year 2025-26.

The committee suggested that the **Rural Agricultural Work Experience Program (RAWEP)** be conducted for a duration of **12 weeks** during the **Kharif season**, followed by an **Industrial Internship for 10 weeks**, with a **one-day orientation program**. This program is to be **offered exclusively in the 7th semester**, while **elective courses** will be scheduled for the **8th semester**.

Dr. T. Ramesh Babu highlighted the significance and syllabi of the M.Sc. Agriculture program as per the adoption of Broad Subject Matter Area (BSMA) Committees Report 2022 of Indian Council of Agricultural Research (ICAR) and proposed its initiation in the disciplines of Agronomy, Soil Science, Horticulture (Vegetable Science and Floriculture & Landscaping), Entomology, and Agricultural Economics under the VIAT at VFSTR. He justified the proposal with supporting data on student enrollment trends at the national level, as well as the availability of faculty and infrastructure within the department.

The following are the observations:

- 1. Agricultural Engineering:** All changes are accepted and no major suggestions are given.
- 2. Computer Science:** All changes are accepted and suggested to teach in relevance to agriculture.
- 3. Agronomy:** It was suggested that in course ***Crop Production Technology II (Rabi Crops)***, topics related to potato, medicinal and aromatic crops should be removed, as they are already covered in horticulture courses. Regarding the ***Water Management*** course, the topics in Module 2, Unit 1 should be adjusted to fit within 16 lectures, with the addition of "*Duty and Delta of Water*" and "*Effective Rainfall*." In Module 2, Unit 3, the inclusion of artificial intelligence needs to be verified, as it may not be relevant. Additionally, it was proposed that this course could be offered by the Agricultural Engineering Department. For the course ***Introduction to Agro-meteorology***, the

inclusion of El Niño and La Niña in theoretical concepts was recommended due to their significance and need to be included. In the **Weed Management** course, studies on the weed seed bank should be incorporated, and the content should be reviewed and elaborated in the lecture outlines. In Module 2 practices, the topic "*Study of Weeds in Different Situations*" should be revised to "*Study of Weeds in Different Cropping Systems.*" For **Dryland agriculture/ Rainfed agriculture and watershed management** course, in Module 2 practices, topics related to *seed treatment and seed priming techniques for drought management* should be handled by the faculty of Seed Science and Technology. In Module 2, Unit 3, the sub title "*Watershed Management*" needs to be modified, and the course should cover long-term rainfall analysis concerning mathematical models and forecasting weather abnormalities.

4. **Soil Science:** It was recommended that in the **Problematic Soils and Their Management** course, the topic "*Biological activity in the rhizosphere of different problematic soils (saline and sodic soils)*" should be included in the practical sessions, as it holds significant importance.
5. **Genetics and Plant Breeding:** It was suggested that in **Crop Improvement-I and II**, the course content should be reorganized module-wise based on crop categories such as Cereals, Pulses, Oilseeds, Cash Crops, Fodder Crops, Vegetables, Fruits, and Flower Crops. Topics under Module 1 and Module 2, Units should be restructured accordingly. Additionally, biotic and abiotic stress should be included within crop-specific discussions rather than as a separate unit. It was also recommended to retain wheat while removing oats from the course. For **Fundamentals of Agricultural Biotechnology**, it was advised to incorporate *synthetic (transgenic) seeds* and include *genome editing tools (CRISPR, ZFN, and TALENs)* in Module 2, Unit 2, as a continuation of the marker-assisted breeding topic. Regarding SEC course **Seed Production and Testing Technology**, it was suggested that the course contents be shared with Dr. Arvind Kumar for confirmation.
6. **Entomology:** In the course **Pest Management in Crops and Stored Grains**, it is recommended that the *use of drones and Artificial Intelligence* in pest management be integrated under the existing Integrated Pest Management (IPM) topic. Additionally, the *IRAC* topic should be shifted to Module-2, Unit-2. In Module-1, Unit-1, it would be better to remove the term "*arthropod pests*" to ensure broader applicability. For Module-2, Unit-1, the *factors affecting stored grain loss* should be listed briefly in the lecture outlines, and the term "*insect pests*" should be rephrased for clarity. Moreover, the title of Module-2, Unit-1 should be updated to "*Domestic and Storage Entomology*" for greater precision. It is also suggested that in Module-2, Unit-2, the *classification of insecticides, toxicity, and formulation* be moved to Module-2, Unit-3. The heading for Module-2, Unit-3 should

be revised to “*Pesticide Residues or SPS*.” These revisions would benefit from further discussion with Dr. T. Naresh.

Regarding the **Fundamentals of Nematology** course, it is recommended that this topic be taught by the Entomology faculty, given its closer alignment with their area of expertise.

7. In the course **Entrepreneurship Development and Business Communication**, it is suggested that the title of Module-2, Unit-3 (*Market Resilience*) be discussed with Dr. K. Kareemulla and revised if necessary. For the course **Agricultural Marketing and Trade**, the unit headings under Module-1, Units-1 & 2 need modification, with Module-1, Unit-2 specifically recommended to be renamed as “*Global Trade Policies in Agricultural Marketing*” for better clarity. Additionally, it is proposed to update the course numbering as follows: **AECO 241 – Entrepreneurship Development and Business Communication**, **AECO 242 – Principles of Agricultural Economics and Farm Management**, **AECO 341 – Agricultural Marketing and Trade**, and **AECO 342 – Agricultural Finance & Cooperation** to ensure a systematic and logical course structure.
8. In the course **Diseases of Field & Horticultural Crops & Their Management**, it is recommended to remove cotton from Module-1, Unit-1 and shift it to Unit-2 under the Cash Crops category for better classification. Similarly, in **Agricultural Microbiology and Phyto-remediation**, the Bioremediation topic under Phyto-remediation is not entirely relevant in its current placement. It is suggested to rearrange the topics, placing Bioremediation at the end to maintain logical flow and coherence in the module structure.
9. In the course **Production Technology of Fruit and Plantation Crops**, it is suggested to revise the unit heading “Fruit Crops” in Module-1, Unit-1, as it does not align with the unit contents. *Dr. M. Chandrasurya Rao* is requested to review and provide recommendations. Additionally, *Betel Vine* should be included under the Plantation Crops unit to ensure comprehensive coverage. For **Production Technology of Vegetables and Spices**, it is recommended to cross-check the unit titles and revise them as necessary to align with the course content. Similarly, in **Commercial Horticulture**, the title of Practice Topic 1 in Module-1, regarding export value, should be changed to “*Introduction*” for better clarity. In **Ornamental Crops, MAPs, and Landscaping**, the course contents need to be rearranged by exchanging the content of Module-1, Unit-1 and Module-1, Unit-2. The title of Module-1, Unit-1 should be modified to “*Production Technology for Ornamental Crops under Open Conditions*”, while Module-1, Unit-2 should be renamed “*Production Technology for Ornamental Crops under Protected Conditions*” to better match their respective

contents. Additionally, the title of Module-2, Unit-1 should be updated to “*Production Technology of Medicinal Crops*”, and the term “*Landscaping*” should be removed from the title. Instead, the Landscaping topic should be relocated from Module-2, Unit-1 to Module-2, Unit-3 for improved coherence.

10. Agricultural Extension Education: Changes are accepted and no suggestions are recommended.

11. Agricultural Statistics: In the course **Basic and Applied Agricultural Statistics**, it is recommended to include *Problems on Probability and Binomial and Poisson Distributions* under Module-1 Practices for a more comprehensive understanding of probability concepts. Additionally, the title of Module-1, Unit-2 should be revised to align with the course contents. In Module-2, Unit-3, the title should be changed to “*Experimental Designs and Sampling Methods*”, removing the term “*Introduction*” for better clarity. Similarly, the heading of Module-2, Unit-1, currently “*Definition of Probability*,” should be modified as it does not accurately reflect the unit’s content. Under Module-1 practices, the topics namely problems on probability theory, binomial distribution and poison distribution need to be added. Under Module-2 Practices, it is suggested to include *Randomized Block Design (RBD)*, *Factorial Randomized Block Design (f-RBD)*, *Split Plot Design*, *Latin Square Design (LSD)*, and *Important Online Tools Used for Statistical Analysis and Data Analytics* Concepts to enhance practical learning and application.

12. Livestock and Poultry Management: It is suggested that Topic 26 be revised to “*Poultry Waste Management*” for better alignment with the course objectives in SEC course **Poultry Production Technology**. Additionally, Topic 25 should be updated to “*Management of Poultry Farm Equipment*” to reflect the specific focus. In the section on Poultry Equipment Management, it is recommended to include a detailed mention of *sanitary measures* to be addressed in the lecture outlines to ensure a comprehensive understanding of hygienic practices in poultry farming.

The following recommendations and approvals are made after the discussion:

Finally, the following five major decisions were taken with respect to adopting the revised curriculum of B.Sc. (Hons.) Agriculture programme in VFSTR as per the ICAR 6th Deans’ committee report in tune with NEP 2020 and implementation M.Sc. Agriculture Programme.

- i. The B.Sc. (Hons.) Agriculture programme will be assessed based on R-25 Regulations of VFSTR from the Academic Year 2025-26.
- ii. Out of six skill enhancement courses (SECs) proposed namely Production Technology of Bioagents, Seed Production and Testing Technology, Beneficial Insect Farming, Poultry Production

Technology, Commercial Horticulture and Floriculture and Landscaping, two will be finalized as per the need based and facilities available in the department to offer during first and second semesters of second year.

- iii. The Rural Agricultural Work Experience Program (RAWEP) will be conducted for a duration of 12 weeks during the *Kharif* season, followed by an Industrial Internship for 10 weeks, with a one-day orientation program. This program will be offered exclusively in the 7th semester, while elective courses will be scheduled for the 8th semester.
- iv. The commencement of the M.Sc. Agriculture program in Agronomy, Soil Science, Horticulture (Vegetable Science and Floriculture & Landscaping), Entomology, and Agricultural Economics will be from 2025-26 Academic Year. Additionally, it is recommended to introduce a PG program in Genetics and Plant Breeding, highlighting its competitive nature and potential to strengthen the institution's reputation in crop improvement by recruiting one Associate Professor or Assistant Professor with Ph.D. in Genetics and Plant Breeding.

Remarks of BoS Experts:

1. **Dr. Arvindkumar:** Acknowledged the faculty for their well-executed presentations during the BoS meeting and appreciated their efforts in aligning with the 6th Dean Committee recommendations. He expressed optimism for the continued progress of academic and institutional development. He advised faculty handling Skill Enhancement Courses to ensure the practical feasibility of course content and arrange necessary facilities to enhance learning. He congratulated the faculty on the upcoming launch of PG programs from the new academic year and specifically recommended the introduction of PG program in ***Genetics and Plant Breeding***, emphasizing its competitive nature and potential to enhance the institution's reputation in crop improvement. Additionally, he recognized the well-equipped Lara Green farm at VIAT, including the Incubation Centre, Conference Hall, and Hi- tech Nursery, as valuable resources for academic and research activities. He appreciated the interactive session with final-year students for its engaging and insightful discussions. Furthermore, he suggested introducing a Skill Enhancement Course in collaboration with the Agricultural Engineering Department to provide hands-on training on drones and advanced agricultural technology, reinforcing the institution's commitment to practical and technological advancements.
2. **Dr. K.P.C. Rao:** Appreciated and congratulated VFSTR on achieving ABET accreditation, recognizing it as a significant milestone. He noted that the extensive course content presents a challenge in concise delivery and emphasized the importance of effectively explaining concepts to enhance student understanding. He stressed the need ***to prioritize placements for the first outgoing***

batch, ensuring their smooth transition into the job market. Expressing optimism for graduates, he hoped for better career opportunities and successful professional settlements, reinforcing the institution's commitment to student success.

3. **Dr. T.V. Satyanarayana:** Congratulated the VFSTR management for securing ABET accreditation and achieving a commendable NIRF ranking. He also extended his congratulations to the final-year students who will soon graduate, recognizing their outstanding performance. He emphasized that all faculty presentations were well-prepared and praiseworthy. Additionally, he expressed his appreciation for the experience of working with Dr. Ramesh Babu at ANGRAU during 2015-17, describing it as a turbulent yet successful period marked by an invincible team.

Closing remarks: Acknowledged the dedicated efforts of the faculty in delivering their presentations and expressed sincere gratitude to the esteemed guests for visiting the Lara Green farm of VIAT and providing valuable suggestions for all courses. He also appreciated the ongoing research trials conducted by research scholars and emphasized the importance of incorporating all recommended changes suggested by external experts to enhance academic and research outcomes.

Member Secretary

Chairperson



7th Board of Studies Meeting of the Vignan Institute of Agriculture and Technology held on 15th February, 2025.



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