



JOURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR)

An International Scholarly Open Access, Peer-reviewed, Refereed Journal

A STUDY ON AWARENESS OF ADD ON COURSES (VALUE ADDED COURSES) W.R.T. FIELD OF STUDY AMONG UNDERGRADUATE STUDENTS OF MUMBAI REGION

¹Prakash Solanki

¹Assistant Professor

Vidyalankar School of Information Technology, Mumbai, India

Abstract: In order to enhance undergraduate students' employability skills, the University Grants Commission (UGC) introduced Add-on Courses, which were short-term, practical, industry-focused training programs added to their core academic degrees. By providing flexible certification in addition to conventional degree courses, these programs aim to close the gap between academic learning and market demands. The current study's primary focus is on undergraduate students' awareness of and participation in add-on courses in the Mumbai region. Journals, official documents, and relevant literature were used to collect secondary data, while 110 respondents were polled using a random probability sample technique to collect primary data. The study employed a descriptive and diagnostic research approach to determine whether students' awareness of Add-on Courses is significantly influenced by their subject of study. The statistical analysis was conducted using a one-way ANOVA. A high F-value (2456.06) and a p-value that was significantly below the 0.05 threshold indicated a statistically significant relationship between awareness levels and the field of study, which led to the rejection of the null hypothesis. This implies that awareness of add-on courses varies considerably across academic disciplines. The findings highlight how important it is to design awareness campaigns and implementation strategies that are relevant to a particular field of study. They also draw attention to the possibility of developing industry-best practices for cooperation, uniform frameworks, and rules to increase student participation. The study ends by emphasizing the need to improve Add-on Courses' integration in higher education in order to fully realize their transformative potential for employability and skill development.

Keywords : Add on courses, value added courses, field of study, undergraduate students.

CHAPTER 1 : Introduction

According to the UGC, tertiary graduates' employability prospects would improve if they had supplementary skills beyond those acquired in their primary field of study. As a result, the regulator created what are known as add-on programs, which let students add shorter, industry-focused, and practical certificate and diploma programs to their degree programs. In order to achieve this goal, the UGC redesigned its undergraduate vocationalization program during the Tenth Plan Period using a modified version of its Career Orientation Program. According to the UGC's vision, the new programs would be a flexible system of advanced diploma, certificate, and diploma programs that would be offered concurrently with traditional undergraduate and graduate degrees. Additionally, the new endeavor was supported by the understanding that future economic liberalization would result in a decrease in "administrative" government posts and an increase in private sector employment. Colleges can begin a certificate, diploma, or advanced diploma program with 30, 60, or 90 credits, respectively, in accordance with the structure recommended by the UGC.

Completing fieldwork or internship training outside of the classroom should account for at least ten of the total credits. No matter the program level, each credit calls for a 15-hour workload. Although colleges are free to decide which add-on programs to offer, they must do so in accordance with UGC criteria and with the affiliated university's consent. The university is in charge of creating the add-on programs' syllabus. In order to develop programs, their design, course content, instruction, and implementation methodology, colleges may also look to individuals, non-governmental organizations, and industry/service organizations for assistance. The allocation of time for lectures, practicum, fieldwork, project work, and internship training should all be made explicit

in the syllabus. The prerequisites and the credit values of each component should also be made explicit. In addition to subject-matter specialists, program courses may be taught by college professors, visiting faculty from other institutions, and affiliated organizations. The college can issue a joint certificate bearing the names of the parent university and the teaching college after the university accepts the college proposal.

CHAPTER 2 : REVIEW OF LITERATURE

A Rroy & B Rajkhowa (2024) – The idea behind value-added courses in education is to supplement the core curriculum with additional learning opportunities outside of the standard academic fields. Secondary education should prioritize the best learning outcomes based on students' cognitive growth through experiential and hands-on learning by incorporating value-added courses into the curriculum. Educational institutions should put more of an emphasis on educating students how to act and behave sustainably given the globalized and resource-constrained world of today. The best time to begin preparing students for the workforce is in secondary school. Therefore, policymakers should consider and concentrate on pedagogy in order to meet the demands of the future. The conceptual framework of value-added courses emphasizes how they enhance the core curriculum by providing students with the practical skills and competencies required for their overall development. Furthermore, a variety of factors influence how durable the behavioral modifications resulting from value-added courses are. The goal of having access to a broad range of knowledge is to aid in the growth of professional skills. Determining the feasibility and challenges of incorporating value-added courses into the secondary school curriculum is the aim of this study.

Vyas, P. *et al.* (2025) – Alongside the massive population growth during the past three decades, technology has also grown at an incredible rate. Alongside this increase, higher education is primarily responsible for improving performance and competitiveness in the domestic and international economy. The skill sets of the majority of higher education institutions' graduating students are usually insufficient to meet business demands, so additional resources are needed to get them ready for the workforce and enable them to work on real-time projects. The current study emphasizes the need for value-added courses to bridge this gap between academia and industry. The study's focus is engineering students, thus it looks into how value-added courses on Industry 4.0 and related technologies might help bridge the gap. A needs analysis survey is first carried out to verify that engineering undergraduate students are aware of the gap between industry and academia, the need for short-term value-added courses, and specifically the need for Industry 4.0-based courses to bridge the gap and support industry readiness. An Industry 4.0-based curriculum is developed in collaboration with academicians and industry professionals, taking into account the findings of the requirement analysis survey as well as the individual strengths and weaknesses of every student. Furthermore, QAA training was given to academic professionals, enabling the contributors to employ non-traditional methods in the development, implementation, and assessment of the course. Taking into consideration the views of academic and industry experts, the members of the boards of studies who also belonged to both verticals designed, developed, and further authorized the value-added course. The course was given to 56 students by faculty members from Vellore Institute of Technology in India and Nottingham Trent University in the United Kingdom, along with prominent industry practitioners. They discussed Industry 4.0 and its supporting technologies, including digital twins, augmented reality, and virtual reality, and offered their insights and knowledge in real time. The students' critical thinking and problem-solving skills were assessed in real time using both digital assignments and conventional quizzes. Eight of the 56 students who finished the course were placed as interns at reputable companies, which further supported the course's goal of closing the gap between industry and academics and guaranteeing industry preparedness.

Longchanenla & Mero, Neizo-ü (2024) – Additional educational programs or modules that are intended to supplement the basic curriculum of a degree program are known as value-added courses. Beyond the standard academic requirements, these courses seek to give students additional abilities, information, and experiences. The goal of value-added courses is to improve students' overall educational experience, increase their employability, and better equip them to handle the demands of the workplace. In order to meet this need, NEP 2020 took a bold step by introducing these skill sets, which go beyond a person's degree and will make them more desirable to hire, maintain, and overcome obstacles in the workplace. The importance of these talents is gradually becoming apparent in society, and as the labor market changes and becomes more focused on industry and entrepreneurship rather than just white-collar employment, it is imperative to acquire a specific set of skills. In addition, we cannot ignore the importance of the skills and experience that make people good human beings with the capacity for logical thought and action, compassion, empathy, resilience, courage, and sound ethical values as envisioned by National Education Policy 2020. As such, prioritizing such courses should be of the highest importance. This study uses the interview method to

interview 25 college instructors who teach the course papers in order to highlight the significance of value-added courses in higher education, assess their current state in Nagaland's colleges, and pinpoint the difficulties that these instructors face. The results of the challenges showed that the distribution of value-added courses among the many departments is unclear, which leads to confusion. The availability of pertinent textbooks for the value-added course papers is another issue. Collaboration among teachers and feedback mechanisms to gather input from students were recommended as suggestive measures for further improvement.

CHAPTER 3 : RESEARCH METHODOLOGY**OBJECTIVES OF THE STUDY:**

- ✓ To study about the concept of Add on courses introduced to UG students of Mumbai region.
- ✓ To study the level of awareness of Add on courses among the undergraduate students w.r.t. field of study.
- ✓ To find the maximum number of students who have taken add in courses w.r.t. field of study.

SCOPE OF THE STUDY:

- 1) There is a scope of developing standardized frameworks through further research work.
- 2) There is a scope of developing best practices for industry collaboration, and strategies to increase student participation to maximize the transformative potential of these courses.

HYPOTHESIS:

1. H₀ - There is no impact on awareness of add on courses among the UG students w.r.t. field of study
H_A - there is an impact on awareness of add on courses among the UG students w.r.t. field of study.

LIMITATIONS OF THE STUDY:

- ✓ The study is restricted to only the Mumbai region.
- ✓ The study is based purely on primary data and there is less literature review.
- ✓ The study is at an initial study stage and lot of research work needs to be conducted for further study.

RESEARCH DESIGN:

Descriptive & Diagnostic Research design

DATA COLLECTION:**Secondary Data**

The secondary data will be collected from various national & International Journals, Government websites & magazines.

Primary Data**Method of Data Collection**

Survey method

Population

General public of Mumbai Region

Sample Size

The estimated sample size is 110 people from the Mumbai region.

Sampling Method

Random Probability Method

Sampling Area/frame

Mumbai Region

DATA ANALYSIS & INTERPRETATION:

- ✓ To study the level of awareness of Add on courses among the undergraduate students w.r.t. field of study.

Anova: Single Factor

SUMMARY

Groups	Count	Sum	Average	Variance
Course/ stream/field of study	106	315	2.971698113	0.065858041
Are you aware of any add-on courses available in your college/university?	106	116	1.094339623	0.086253369

ANOVA

Source of Variation	SS	df	MS	F	P-value	F crit
Between Groups	186.7971698	1	186.7971698	2456.057295	7.4935E-118	3.88612144
Within Groups	15.97169811	210	0.076055705			
Total	202.7688679	211				

Interpretation

The purpose of this study was to examine whether Course/stream/field of study is related to the awareness of Add on courses/ value added courses among respondents. The data was analyzed using a one-way ANOVA (Analysis of Variance), which compared the means of two groups: the field of study and the awareness of add on courses/ value added course. The ANOVA results showed a statistically significant difference in awareness levels across different field of study. The F-value was calculated to be approximately 2456.057295, while the critical F-value (F crit) for this test was 3.88612144. Because the F-value exceeds the critical value, we conclude that there is a significant difference between the group means. Additionally, the p-value was 7.4935E-118, which is much less than the standard alpha level of 0.05. This strongly supports the rejection of the null hypothesis. Rejecting the null hypothesis implies that field of study does indeed have a significant effect on respondents' awareness of Add on Courses/Value Added Courses. In other words, individuals with different field of study exhibit significantly different levels of understanding or awareness regarding Add on Courses/Value Added Courses concepts. According to the findings, not all academic disciplines use or promote supplemental courses in the same manner. Some—such as technology, management, and commerce—may incorporate these initiatives more actively than others. Students in some subjects receive knowledge inequitably as a result of the lack of coordinated awareness campaigns. The statistical evidence clearly shows that uniform frameworks, industry-academia collaboration, and field-specific awareness campaigns are necessary to ensure that all undergraduate students, regardless of their field of study, benefit equally from add-on courses.

RECOMMENDATION & SUGGESTIONS:

The following suggestions are put forth in light of the study's findings on undergraduate students in the Mumbai area's awareness of add-on courses:

- ✓ Campaigns for Stream-Specific Awareness:
- ✓ Including in the Curriculum:
- ✓ Working together with the industry:
- ✓ Orientation and Training for Faculty:
- ✓ Encouraging Student Involvement:
- ✓ Mechanisms for Monitoring and Feedback:
- ✓ Support at the Policy Level:

CONCLUSION:

The current study sought to determine whether undergraduate students in the Mumbai area were aware of add-on courses, also referred to as value-added courses, with specific reference to their field of study. The findings of descriptive and diagnostic analysis supported by ANOVA show that students' awareness of add-on courses differs significantly depending on their academic field. This demonstrates how the topic of study significantly affects awareness levels, which in turn affect students' propensity to participate in extracurricular activities. The results highlight the need to tailor awareness campaigns and implementation strategies to certain academic streams rather than employing a one-size-fits-all approach. By doing this, institutions can more effectively bridge the gap between academic learning and industrial demands. In order to ensure the seamless integration of add-on courses into undergraduate education, the research also emphasizes the importance of developing standardized frameworks, industry-academia partnership best practices, and constant university and policymaker initiatives. Lastly, it should be mentioned that elective courses can help students develop their skills, become more employable, and prepare for fast-paced work environments. To fully realize this potential, industry-institution collaboration, flexible curricula, and targeted awareness efforts must be prioritized. The findings set the stage for future research that can expand the scope to include additional topics and look into how these programs affect students' overall development and future career paths over the long run.

REFERENCES

- 1) Rroy, A. D., & Rajkhowa, B. (2024). Value added courses: A sustainable approach to education of students in the secondary schools of Kamrup district. *Journal of Computers, Mechanical and Management*, 3(2), Article 240128. <https://doi.org/10.57159/gadl.jcmm.3.2.240128>.
- 2) Vyas, P. *et al.* (2025). Impact of Value-Added Courses and Personalized Method of Delivery in Achieving Industry Readiness: An Industry 4.0 Perspective. In: Fortino, G., Kumar, A., Swaroop, A., Shukla, P. (eds) *Proceedings of Third International Conference on Computing and Communication Networks. ICCCN 2023. Lecture Notes in Networks and Systems*, vol 977. Springer, Singapore. https://doi.org/10.1007/978-981-97-2671-4_47.
- 3) Longchanenla, & Mero, N. (2024). Value added courses in the colleges of Nagaland: An exploratory study. *Edumania – An International Multidisciplinary Journal*, 2(4), 221–229. <https://doi.org/10.59231/edumania/9084>.