

CRITERIA-3

Research, Innovations and Extension

3.2 Innovation Ecosystem

3.2.1: Ecosystem for innovations/ IKS/ IPR/ Incubation centre etc. by the institution

Sl No	Name of the Course	Page No
1	Introduction	2
2	IPR Awareness	3
3	ET &GC	4
4	IEDC	9
5	Campex	14

Introduction

The institute has a focus on creating an ecosystem for innovations, fostering a culture of creativity, research, and entrepreneurship.

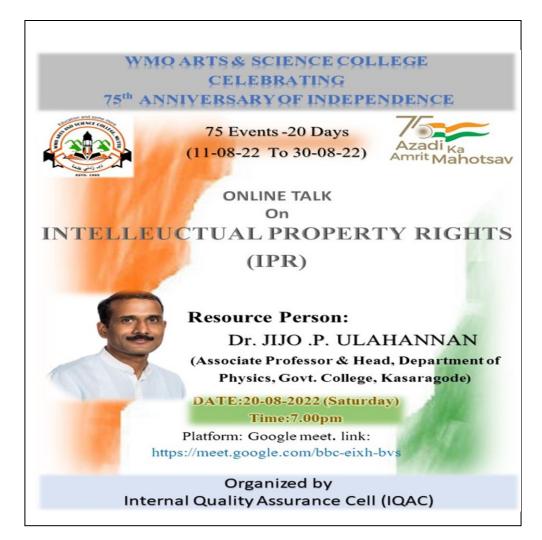
Incubation Centre

The institution has set up an Incubation Centre with the aim of nurturing entrepreneurial talent and promoting technology-driven startups. The Incubation Centre provides a conducive environment for budding entrepreneurs to develop their ideas into market-ready products or services. It offers mentorship, infrastructure support, networking opportunities, and access to funding agencies. This initiative has significantly contributed to fostering an innovation-driven culture on the campus.

Campex, IEDC, ET&GC and IPR are the initiatives of the college towards incubation.

IPR Awareness

The institution has undertaken significant efforts to raise awareness about Intellectual Property Rights among students. All undergraduate students have to take an extra credit audit course on Intellectual Property Rights in their third semester. The college conducts an end semester examination to assess their knowledge on IPR based on a question bank provided by the University. An online talk on intellectual property right by Jijo P Ulahannan, organized. Faculty members are encouraged to incorporate IPR concepts into their teaching, and students are introduced to the basics of patenting, copyright, and trademark laws.



ET & GC Report - Electronics

Introduction

The Electronic Training and Guidance Cell (ET&GC) was instituted in the year 2003 by the Department of Electronics with the motto of "Striving for Success."

Objectives

1. Entrepreneurship

The primary objective of the center is to provide training and guidance programs in the design, manufacturing, troubleshooting, and maintenance of various electronic equipment and circuits. The courses offered by the center are tailored to meet the needs of students aspiring for self-employment and the establishment of new industries in the field of electronics.

2. Consultancy

ET&GC also has the objective of providing consultancy services to institutions and society. This consultancy service aims to assist organizations and individuals in purchasing and operating laboratory equipment and electronics items for their specific needs, both in educational and domestic settings.

Courses Offered Initially

When the Electronic Training and Guidance Cell was first established, it focused on providing foundational courses in consumer electronics. These courses were designed to equip students with a solid understanding of the fundamental principles and practical skills required in the field. The initial courses offered by the center include Radio Engineering, Compact Fluorescent Lamp, Regulated Power Supply, Electronics Choke, Transformer Winding and Television Maintenance.

Introduction of New Courses in 2012

Recognizing the evolving nature of the electronics industry and the changing demands of the era, the ET&GC introduced two new courses in 2012 to ensure that students were equipped with the latest skills and knowledge. The courses

introduced during this period were: Network Engineering and Computer Hardware Engineering

Course Restructuring in 2018

The ET&GC continuously evolved to meet the changing demands of the electronics industry. The center decided to drop previously offered courses due to their perceived insignificance. The newly introduced courses include Structured Cabling Techniques, House Wiring Techniques, House Wiring/Equipment Maintenance, Circuit Simulation, and PCB Designing and Fabrication.

Sl. No.	Course	Description	Duration	Number of Participants
1	House Wiring/Equipment Maintenance	To make understand the students on electrical wiring and household equipment's preliminary maintenance and precautions.	30 Hours	20
2	House Wiring Techniques	To make understand the students on the principles and techniques of electrical wiring in residential buildings, covering safety regulations, wire sizing, installation practices, and maintenance.	30 Hours	
3	Structured Cabling Techniques	To make understand the students on Computer network cabling and connectivity basics and preliminary maintenance techniques and aspects to support an office while installing and maintenance of computer-related technical problems.	30 Hours	
4	Circuit Simulation, PCB Designing, and Fabrication	To make understand the students on students learn the process of simulating electronic circuits using Lt Spice software, designing printed circuit boards (PCBs), and fabricating them, essential for electronics prototyping and manufacturing.	30 Hours	

Training Methodologies and Industry Collaboration

The Electronic Training and Guidance Cell employed a range of training methodologies to ensure effective learning outcomes. Theoretical instruction, practical sessions, hands-on training, and industry collaboration were integral parts of the training programs. Lectures and demonstrations were conducted to provide theoretical knowledge, while practical sessions allowed students to work with electronic components and equipment to develop practical skills. The center also collaborated with industries to facilitate exposure to real-world practices, industry trends, and guest lectures from experts. For the smooth functioning of ET&GC, we use our lab facilities.

Impact and Success Stories

The introduction of Network Engineering and Computer Hardware Engineering courses in 2012 proved to be instrumental in meeting the industry demands of the era. Graduates from these courses found employment opportunities in various sectors, including IT companies, telecommunications, networking firms, and computer hardware manufacturing. Many students also chose to venture into selfemployment by establishing their own businesses, capitalizing on the skills and knowledge gained through the courses.

Prominent Alumni Entrepreneurs

Dr. Jinesh: aiSon Technologies, Zürich	
Mr. Sharafudheen: Altron digital systems pvt.Ltd	SAVE TODAY. SURVIVE TOMORROW
Mr. Noufal: Microtechlabz	microtechlabz

Mr.Shameer O.K : Chairman and MD of Delishus Finland	Belishus SERVICES OY
Mr.Fasalu Rahman:	Webeaz Technologies Pvt. Ltd.
Webeaz Technologies Pvt Ltd.	BENGALURU (DUBAI) CAUCUT

Internships provided:

S1. No.	Name	Batch	Company Details			
1	Mr. Muhammed Shamil	2020-2023				
2	Mr. Adarsh	2020-2023				
3	Mr. Muhammed 2020-2023 Shamil		Bismil systems and solutions			
4	Mr. Fainas	2018-2021				
5	Mr. Amal Ajas MJ	2017-2020				
6	Mr. Jihad Ali	2016-2019				
7	Mr. Sudheep	2016-2019	Bismil systems and			
8	Mr. Ramees	2015-2018	Bismil systems and solutions			
9	Mr. Riyas	2015-2018				
10	Mr. Shahabaz	2015-2018]			

Conclusion

The Electronic Training and Guidance Cell has continuously adapted its course offerings to cater to the evolving needs of the electronics industry. By discontinuing courses deemed less relevant and introducing new courses, the center ensures that students are equipped with the latest skills and knowledge in the field of electronics.

The success stories of alumni in securing employment and pursuing entrepreneurial ventures prove the effectiveness of the training programs offered by the center. The ET&GC remains committed to its motto of "Striving for Success" and continue to play a vital role in shaping the future of the students through its comprehensive training and guidance programs.

The consultancy services of ET&GC play a vital role in supporting institutions and individuals in making informed decisions regarding the purchase and operation of laboratory equipment and electronics items. The consultancy services contribute to the center's objective of fostering success by providing comprehensive support to institutions and society in the field of electronics.

The student-led technical support program implemented by the Electronic Training and Guidance Cell demonstrates the center's commitment to practical skill development and community engagement. By providing technical assistance to neighbouring schools in running their electronics labs, the program offers benefits to both the trained students and the recipient schools.

INCUBATION CENTRE & IEDC

Kerala Startup Mission's Innovation and Entrepreneurship Development Centre (IEDC) established in the college in the year 2021. IEDC aim to provide students with an opportunity to experiment and innovate. It provides avenues for creative students to learn, collaborate and transform their innovative ideas into prototypes of viable products and services.

Entrepreneurship in India is on the verge of rapid expansion. The concept of the Innovation and Entrepreneurship Development Centre (IEDC) was formulated to promote innovation and entrepreneurial culture in educational institutions and to develop institutional mechanisms to foster techno-entrepreneurship for the generation of wealth and employment.

IEDC provides support functions, mentorship, and resources to individual entrepreneurs or entrepreneurial setups. It enables them to get expert advice and technical guidance they need to survive for a longer time. It helps in budding SMEs and startups with the ideal location to develop and grow their businesses, offering everything from virtual support to a place that makes them feel alive. It provides a vibrant co-working environment where relationships and new ideas are created.

VISION:

The Incubation Centre offers young people and new-age entrepreneurs a place to develop their creative ideas into workable business plans and provides a platform for aspiring entrepreneurs to launch a business with the fewest possible risks.

MISSION:

The role of the incubation center is to support and enable the next generation of business entrepreneurs to address regional issues. Graduate and postgraduate students in various disciplines, alumni of the college, local industries, and also other students of the Wayanad district can come up with ideas that might lead to a startup.



KERALA STARTUP MISSION Abstract

Kerala Startup Mission - Establishment of new Innovation and Entreprenurship Development 5SION Center - Sanctioned - Orders Issued - - - ent of Kerala

KSUM/669/2021

KERALA STARTUP MISSION

Date: 02.11.2021

ORDER

As part of the Youth Entreprenurship Development Program, IEDCs are being established in the colleges having to promote technology based entreprenurship among the students. Accordingly IEDCs are established in 283 colleges. The applications received for establishment of new IEDC are examined and sanction is accorded for establishment of new IEDC at the 58 institutions as detailed in the Annexure to this order.

Sanction is accorded for opening a bank account by each of the IEDCs exclusively for the purpose of the IEDC jointly by the Principals and Nodal Officer of the IEDCs of the institutions.

To:

The Institutions concerned File No KSUM/420/2021-AM(Funding)

John M Thomas Chief Executive Officer

Fogwarded/ By Order 500-**B. Sreekumaran Nair** Secretary& Registrar

- 3. There will be an annual review of the activities and progress of the IEDC, and the centre should submit an Activity report to this effect, through the Portal.
- 4. IEDC will continue to be under the mentoring of Kerala Startup Mission and Institution to report its progress to Kerala Startup Mission, till such time when the college gets recognized by the Department of Science & Technology as an approved IEDC under the National Science and Technology Entrepreneurship Development Board.
- 5. The Financial assistance can be used for Conducting workshops, seminars, Makathons, Hackathons and other such Entrepreneurial Activities which may be helpful for the Innovators under IEDC
- 6. The financial assistance cannot be used for sponsorship, infrastructure creation, advertisements and PR activities. The fund cannot be used for Payment of rent and other utility charges, Purchase of assets, Purchase of high-end devices (can use devices available with KSUM and its member IEDCs or incubators), Patenting expenses (Innovators can apply for the patent reimbursement scheme), towards manpower payment, payment for TA/DA and fuel expenses (Innovators can apply for the travel scheme), Remuneration for faculties etc

G3B, Thejaswini, Technopark Campus, Kariyavattom, Trivandrum, Kerala 695581, Tel: 0471-2700270, Fax: 0471-2700224, www.startupmission.kerala.gov.in

INNOVATION AND ENTREPRENEURSHIP DEVELOPMENT CENTRE



- 7. Rough Outlay of the utilization may be like
 Incidental/ Miscellaneous: 2 %
 - Marketing: 3%
 - Conducting & Participation (Maker session, Hackathons, Events, Workshops, Seminars etc under Innovation(25%), Technology(40%) and Entrepreneurship(30%) : 95%
- 8. T he IEDC/EDC shall function as an independent unit within the parent institution. IEDC may act as a platform for all activities of the College with respect to Technology Entrepreneurship
- 9. For find utilization report will be prepared on a quarterly basis by the IEDC nodal officer and shall be submitted to Kerala Startup Mission before 25th March of every year in the Portal.
- 10. The Kerala Startup Mission logo can be used only for the joint activities by the Institution and KSUM. Any activities done under IEDC can use <u>IEDC logo</u>
- 11. T he performance of the IEDC is rated through the Innovate Portal, IEDCs are advised to upload details on the portal immediately after the event/programme.
- 12. IEDCs must audit their accounts every year and submit the report on the portal. Further assistance
- 13. would be limited to IEDCs based on fund utilisation and submission of Audited statements on the portal.

More Details at <u>https://iedc.startupmission.in/</u> Reference Document 1: I<u>EDC-Handbook for Nodal Officers</u> Reference Document 2 : <u>UtilizationCertiAcation</u> Template Reference Document 3: <u>Statement of Expenditure</u> Template

Yours Sincerely

Sreekumäran Nair Secretary & Registrar Kerala Startup Mission

August 11, 2021

G3B, Thejaswini, Technoparl< Campus, Kariyavattom, Trivandrum, Kerala 695581, Tel: 0471-2700270, Fax: 0471-2700224, www.startupmission.kerala.gov.in

IEDC SUMMIT AT PALA ON 5th MARCH 2022

The largest summit in Asia for ambitious student entrepreneurs was held at St. Joseph's College of Engineering and Technology, Palai. 10 IEDC student members from WMO Arts and Science College, as well as Assistant Nodal Officer Ms. Sabeerath.K and faculty member Ms. Shaheera K.A. participated in the programme. It was an enlightening experience for students and faculty .The ideation sessions, engaging community gatherings, product expos, as well as our interactions with very prominent businessmen.



ENOVA 2.0, NATIONAL WORKSHOP - 13th,14th&15th MAY 2022

Description

ENNOVA is a national level tech fest conducted at MES college, Perinthalmanna .Four of our IEDC members participated there and received certificates.









Mr. Shibin CEO - IEDC MEA



Ms. Jeeja Menon Nodal Officer - IEDC MEA

CAMPEX REPORT

Campex is an indigenously developed ERP system at WMO Arts and Science College. It is a is a versatile and efficient tool for student management, fee collection, and accounts. The basic version of Campex ERP software using since 2017, for student management and accounts as mentioned, developed by Ms. Mentor Performance Rating Pvt. Ltd, The Mentor Performance equipped students with practical skills in software development, designing, and backend and frontend operations. Further development and refinement of the ERP system done at the college by BCA students with the guidance of faculty members and external experts. This report highlights the features and benefits of Campex, its implementation process, training initiatives, and future plans.

FEATURES AND BENEFITS OF CAMPEX:

1. Student Information Management: Campex simplifies the management of student information, including admissions, attendance records, academic progress, and personal details.

2. Fee Collection and Tracking: The system provides a seamless platform for fee collection, ensuring transparency and accuracy in financial transactions.

3. Accounting Functionalities: Campex offers robust accounting functionalities, simplifying the management of financial records and enabling efficient reporting.

4. User-Friendly Interface: With its intuitive design, Campex empowers college administrators to enhance their efficiency and accuracy in administrative tasks.

IMPLEMENTATION AND TRAINING:

1. Procurement and Collaboration: The basic version of Campex ERP software and associated training costs were facilitated by Ms. Mentor Performance Rating Pvt. Ltd under the leadership of Mr. Shareef, the CEO of Mentor Performance Private Ltd.

2. Practical Skills Development: The college collaborated with Mentor Performance to equip students with practical skills in software development, designing, and backend and frontend operations.

3. Incubation Centre: An Incubation Centre was established at WMO Arts and Science College to foster further development and refinement of the ERP system. Mr. Muhammed Anas, a BCA student, led the efforts with the guidance of faculty members and external experts.

4. Technical Support Staff: Students who received comprehensive training, such as Muhammed Anas, Muhammed Midhulaj Ali, and Midhlaj C, were appointed as technical support staff members for the Campex ERP system.

INVESTMENTS AND COMMITMENT:

1. Implementation Costs: The cost incurred for the implementation of Campex includes Rs. 364,433/- for installation and backend creation and Rs. 685,350/- for Human Resource-related expenses.

2. On-going Support: The college is committed to the successful implementation and support of the Campex ERP system, reflecting its dedication to benefiting the entire college community.

FUTURE PLANS:

1. Unified and Digitalized Environment: The college aims to expand the use of Campex ERP system across all areas, irrespective of self-financed or aided streams, to create a unified and digitalized environment that promotes transparency and efficiency.

2. Streamlining Administrative Processes: The future plan includes streamlining admission procedures, managing accounts, and maintaining student details and records.

3. Consistent Experience: By implementing the ERP system uniformly, the college aims to eliminate disparities and ensure a consistent experience for all students.

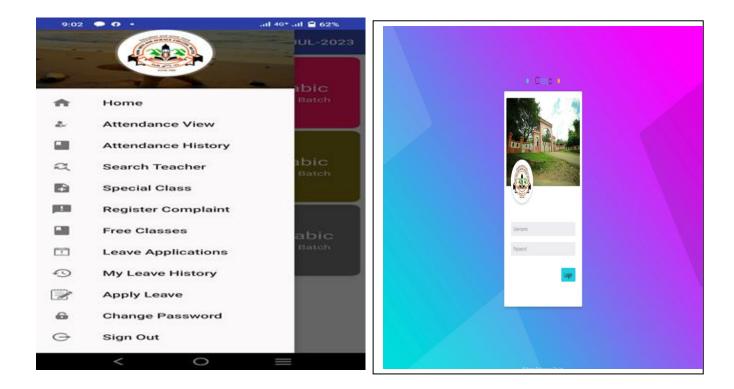
4. Optimized Resource Utilization: The goal is to create a cohesive and technologically advanced ecosystem that optimizes resource utilization and

15

enhances the learning experience for every student at WMO Arts and Science College.

CONCLUSION

The Campex ERP system at WMO Arts and Science College is an efficient tool that streamlines administrative tasks, enhances transparency, and improves operational effectiveness. With its comprehensive features, user-friendly interface, and on-going support, Campex is poised to revolutionize administrative processes and create a unified digital environment. The college's commitment to expanding the system and providing a consistent experience for all students reflects its dedication to technological advancement and improved resource utilization.



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									100%		
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