

REPORT ON INDUSTRY ON CAMPUS



Industry Institute Interaction Cell
Department of Technical Education
Govt. of Kerala

Feb. 2024

1. Preface

With the boost of Indian economy, there is a greater competition among industries and this situation is demanding adoption of latest technologies. There is an urgent need for engineering / diploma student with specific skill sets for industries. Encouraging industry- institute interaction gives exposure to industry culture to students while they are in campus. It also improves the confidence of students, improves their employability and encourage industry readiness.

Realising the need of the industries and the long term benefit it offers to our student and faculty community, our visionary Government through G. O. (Ms) No. 257/2021/HEDN, dtd.03.05.2021, took bold initiatives to set up **Industry on Campus (IOC)** program and issued guidelines for the same. This flagship program of the Government set up as per AICTE norms and implemented in Polytechnic Colleges across the State, fosters collaboration between industries and academic institutions. The initiative is intended to instil the spirit of industry dynamics, drive technology and business innovation among the students. Government also accorded administrative sanction to procure equipment to promote IOC activities. Accordingly, the Additional Skill Acquisition Programme (ASAP) a joint initiative of General and Higher Education established high end industry level laboratories in the Advanced Skill Development Centres at Government Polytechnic colleges.

Introduction of the concept of IOC in technical institutes and hand holding them to initiate various industry relevant activities were done effectively by ASAP. ASAP has now withdrawn its activities related to IoC and Directorate of Technical Education is now entrusted with then responsibility of providing all administrative, technical advices guidance and support. For Directorate of Technical Education to take up this responsibility a set of new guidelines and standard of procedures has to be formulated.

This shall be taking a slightly different track, as DTE which is the administrative wing of technical education runs with a different mandate compared to ASAP which is constituted as a section 8 company.

IOC being a pioneering scheme envisaged by the Government, needs to be scaled up to all technical institutes. This scheme stands as a testament to the success of "Earn while you Learn" and "Learning through Experience" concept. It improves the employability quotient of the students and facilitates their placement. If done with a vision and proper guidelines and support, it is sure to change the technical education scenario and will also pave way for boosting the State's economy. For the effective implementation of IOC activities Department of Technical Education needs support of like Dept of Industries and Commerce, Govt. of Kerala, Kerala State Up Mission, Chamber of Commerce and Industries, Federation of Indian Chambers of Commerce and Industry etc.

2. Objectives

The primary objective is to encourage the practical application of theoretical aspects and instill entrepreneurship and product innovation among students. This is achieved by exposing them to the real industry atmosphere within the institution, fostering the spirit of 'Earn while you Learn' and 'Learning through Experience'.

3. Report of Industry on Campus Activities till May 2023

So far, we have successfully identified **40 IOC units** in **20 Polytechnic colleges**, and **15** of them are functional. Through these units, we have obtained work orders worth **Rs 59,25,433** from various industries and organisations.

Table 1. Details of products/ services provided by IOC units and revenue generation (Status as on May 2023)

Sl no	Institution	Participating Industry / Organisation	Type of product /Service	Total amount of work orders received
1	GPTC Palakkad	KARD Jal Jeevan Mission	Community mobilisation model	3,45,000

		project	Hoardings for 40 Grama Panchat's of Kerala under KARD	35,99,120 (Under process)
		District Panchayath Palakkad	Wastewater treatment plant at FLC TC KINFRA Kanjikod (Novel technology developed by GPTC Palakkad)	3,19,578
		Stalkhind Industries Kanjikod	Power failure monitoring and alert system	38,000
		Ere Bussiness solutions	Website front end documentation works	Agreement not signed
		Axion ventures	e-Autorikshaw and electric scooter assembling, e-Conversion of petrol/diesel autori-kshaw	Agreement not signed
			CNC Training	Under process
		Metrolite	Roofing sheet manufacturing machinery	Agreement not signed
			Total	4301698
2	GPTC, Perumbavoor		Trainer kits	25,000
			Equipment maintenance cell	30,000
			Lithium ion battery manufacturing	Under process
			CNC training,	
			Arduino training	
			Total	55,000
3	GPTC, Attingal	ManoLab	Agricultural equipment	1,50,000
		Wheo Lab	e-Auto conversion kits	8,00,000

			developed by GPTC, Attingal	
		She-biz	LED video wall manufacturing and installation at 70 Grama Panchayaths of Kerala	39 Lakhs
		Axeon Ventures	e-Autorikshaw and electric scooter assembling, e- Conversion of petrol/diesel autorikshaw	Assembling of 3 Wheeler
			Maintenance cell	25,000
4	MTI Thrissur	KARD JJM Project	Public awareness system assembling	277375
		TIG Training	TIG welding training	Under Process
4	GPTC Nedumkanda m	Socio Economic Unit Foundation	LED Video wall manufacturing unit	277360
		Farmers Grid Green Solutions	Solar dryer manufacturing	Under process
		Traders consortium	Electronic and Electrical equipment service network	Under process
5	GPTC Kalamassery	Farmers Grid Green Solutions	Inoculum manufacturing unit	Under process
		Nexgen Builders	pre-fab building materials manufacturing unit	Under process
6	GWPTC Nedupuzha Thrissur	Hykon	Electronic PCB assembling	Under process
		MA Skills	Software training and Job works	Under process
7	EKNM GPTC Thrikaripur	eRE Business solutions	Software company	Under process

			Electronic service network	Under process
8	GPTC Kottayam		CNC Training	Under process
9	GPTC Perinthalmanna		CNC Training	Under process
Total				5925433

4. Report of Industry on Campus Activities from June 2023 to 30th Jan 2024

The primary impediment faced by the IOC units since March 2023 was the lack of an initial amount required for the procurement of essential raw materials and components. This financial limitation significantly hampered the units' ability to execute planned activities and projects effectively. This and numerous other challenges led to a deceleration in activities, causing a delay in the commencement of several projects in the pipeline.

Additionally, we would like to draw your attention to the decision by ASAP to withdraw its involvement in IOC unit activities. Consequently, the responsibility for managing IOC activities has been transferred to the Department of Technical Education (DTE), and this transition is presently underway.

To rejuvenate the activities of IOC and to identify the challenges faced by institutes in successfully implementing IOC activities, learn the success stories etc a **One Day Training Program of State IOC coordinators** was organised by Industry Institute Interaction Cell of Directorate of Technical Education.

5. Report on the One Day Training Program

The One-day work shop on Industry-Academia-Connect, State level training of IOC coordinators was held at KTDC Chaithram, Thampanoor, Thiruvananthapuram on 1st December 2023. The event was aimed at understanding the status of IOC program in various institutes, understand their success, challenges etc and motivate to take up

more activities under IOC. IOC coordinators from 33 polytechnics (31-Govt. and 2 aided) participated in the program.

Dr. Ramachandran. M, Senior Joint Director (PS) welcomed the gathering.

Dr. Rajasree M.S., Director, Directorate of Technical Education presided over the function. In her presidential address she stressed the importance of strengthening academia- industry collaboration and outlined the roadmap for future activities of Industry On Campus.

Mr. Anoop Ambika, CEO of Kerala Startup Mission, delivered a motivating talk. He suggested to identify few institutes initially having competency in core areas and later based on the lessons learnt IOC activities can be extended to other institutes. Mr. Anoop Ambika extended all support from Kerala Start up Mission for the academia-industry connect.

Mr. Rajeev G, Additional Director (G) at the Directorate of Industries and Commerce in his presentation elaborated on the MSME registration process, highlighted opportunities for entrepreneurs, and discussed various supporting schemes available under State and Central Governments.

Following the inauguration and address by Sri Anoop Ambika and Sri Rajeev G, brief presentations were made by the IoC coordinators of various polytechnic colleges highlighting the ongoing activities of Industry On Campus, success stories, challenges faced, and opportunities identified. Mr. Sulficar, DD(Gen) and Mrs. Seema K.N., Joint Controller of Technical Examinations critically reviewed the presentations. Mr. Sulficar, DD (GEN) while giving his review comments suggested that IOC coordinators organize a college-level Innovative Product Expo before February 2024. Selected products from this expo could then be showcased at a state-level expo in February, inviting delegates from leading MNCs and other industries he said. The goal shall be to facilitate tie-ups with industries for setting up campus industrial units.

In the interactive session that followed, participants stressed the necessity of training for CNC production processes, need for proper directions regarding maintaining accounts, and need for GST filing.

Dr. Ashalatha R, Joint Director (IIIC), presented a comprehensive way forward for the Industry On Campus program. She urged coordinators to maximize the utilization of higher-end machines supplied by ASAP Kerala and set a target of establishment of minimum of three IOC units at each campus within the next three months.

Mr. Prasoon Mangalath delivered felicitation and Industry On Campus Coordinator Dr. M Pradeep delivered the vote of thanks.

After the day-long technical presentations, an interactive session was held for understanding the challenges that institutes face while executing/ planning to execute IOC projects.

Out of 46 Government Polytechnic Colleges, 31 colleges participated and 15 did not attend the training program and two out of six aided polytechnics participated in the program.

The meeting ended at 4.15 pm after a group photo of the participants.

Table 2. List of colleges participated in the training program

Government Polytechnic Colleges

1. Central Polytechnic College, Vattiyoorkavu
2. GPTC, Attingal
3. Women's Polytechnic college, Kaimanam
4. GPTC, Nedumangad
5. GPTC, Punalur
6. GPTC, Ezhukone
7. GPTC, Vennikulam
8. GPTC, Adoor
9. GPTC, Vechoochira
10. GPTC, Cherthala
11. Women's Polytechnic College, Kayamkulam
12. GPTC, Nattakam, Kottayam
13. GPTC, Pala
14. GPTC, Vandiperiyar, Kumily
15. GPTC, Purappuzha
16. GPTC, Kothamangalam
17. GPTC, Perumbavoor

18. Women's Polytechnic College, Kalamassery
19. GPTC, Koratty
20. GPTC, Kunnamkulam
21. GPTC, Chelakara
22. GPTC, Palakkad
23. GPTC & IPT, Shornur
24. GPTC, Perinthalmanna
25. GPTC, Thirurangadi
26. Women's Polytechnic College, Kottakal
27. GPTC, Kozhikode
28. GPTC, Thottada, Kannur
29. GPTC, Meppadi
30. GPTC, Mananthavadi
31. GPTC, Periya, Kasargod

Aided Polytechnic Colleges

32. Sree Naarayana Polytechnic College, Kottiyam
33. NSS Polytechnic College, Pandalam

6. Classification of Institutes based on the extent of IOC activities undertaken

Based on the presentation made by IOC coordinators in the one-day training program and based on the details collected by the Industry Institute Interaction Cell (IIIC) of Directorate of Technical Education, the polytechnic colleges can be classified into three categories. This is based on the extent of IOC activities done by them

Category 1: Organizations currently successfully implemented by IOC

Category 2: Institutions where IOC has huge potential and has a clear understanding of existing projects but cannot implement them due to various reasons. Some discussions are going on with industries, but yet to develop into an IOC project

Category 3: Institutions which have not undertaken any activities in connection with the IOC so far due to various reasons like lack of infrastructure, lack of expertise in core area, not conducive geographical location and so on and so forth.

Table 3. Categorisation of colleges based on IOC activities

List of colleges participated in IoC training program on 1st Dec	
Category 1- Institutions successfully implemented by IOC and is having IOC activities	
1	GPTC, Perumbavoor
2	GPTC, Attingal
3	GPTC, Palakkad
4	GPTC, Perinthalmanna
5	GPTC, Kozhikode
6	GPTC, Nattakam, Kottayam
Category 2- Institutions has huge potential, IOC activities not started, discussions with industries	
1	AKNM, Thiroorangadi
2	GPTC, Adoor
3	CPT, Thiruvananthapuram
4	GPTC, Kasargod
5	GPTC, Kunnamkulam
6	Women's Polytechnic College, Kottakal
7	IPT, Shornoor
Category 3- Institutions which have not undertaken any activities due to various Reasons	
1	Women's Polytechnic College, Kaimanam
2	GPTC, Nedumangad
3	GPTC, Punalur
4	GPTC, Ezhukone
5	GPTC, Vennikulam
6	GPTC, Vechoochira

7	GPTC, Cherthala
8	Women's Polytechnic College, Kayamkulam
9	GPTC, Pala
10	GPTC, Vandiperiyar, Kumily
11	GPTC, Purappuzha
12	GPTC, Kothamangalam
13	Women's Polytechnic College, Kalamassery
14	GPTC, Koratty
15	GPTC, Chelakara
16	GPTC, Thottada, Kannur
17	GPTC, Meppadi
18	GPTC, Mananthavadi
Aided Polytechnic Colleges	
1	Sree Narayana Polytechnic College, Kottiyam (Category 2)
2	NSS Polytechnic College, Pandalam (Category 2)
List of colleges NOT participated in the training program	
Category 1- Institutions successfully implemented by IOC and is having IOC activities	
1	GPTC, Nedumkandom
2	Maharajas Technological Instt., Thrissur (Nodal Polytechnic)
Category 2- Institutions where IOC activities have not started- discussion with industries	
1	GPTC, Muttom (Nodal Polytechnic)
2	Women's Polytechnic, Nedupuzha, Thrissur.
3	GPTC, Mattannur
Category 3- Work not Started	
1	GPTC, Neyyattinkara

2	GPTC, Kaduthuruthy
3	GPTC, Kalamassery (Nodal Polytechnic)
4	Sree Rama Government Polytechnic, Thriprayar. (Valappad)
5	GPTC, Manjeri , Malappuram
6	Women's Polytechnic, Kozhikode.
7	RWPTC, Payyannur
8	GPTC, Naduvil
9	GPTC, Meenangadi (Nodal Polytechnic)
10	GPTC, Thrikkariapur
Aided Polytechnic Colleges	
1	Carmel Polytechnic, Alappuzha
2	Thiagarajar Polytechnic, Alagappangar
3	S.S.M Polytechnic, Tirur
4	Swami Nithyananda Polytechnic, Kanhangad

7. Measures taken at DTE for revitalising IOC activities

The following are the actions taken at DTE

- a. Standard Operating Procedure (SOP):** A SOP is developed to ensure a smooth transition, detailing a tripartite agreement between DTE, the institution, and industry. A MoU format for aspirants has been developed to facilitate IOC activities under DTE and template for Expression of Interest (EOI) from aspiring institutions were finalised. These are available in DTE website.

Industry Institute Interaction Cell of DTE has gathered information regarding the training needs of Polytechnic staff to where costly equipments like CNC machine, 3D printers, robotic kits etc were supplied by ASAP. We are also in the process of initiating measures to update the Annual Maintenance Contract (AMC) for these machinery and instruments provided under the Industry On Campus (IOC) activities of the ASAP based on the details we collected in this regard from the institutes.

- b. Revolving Fund Proceedings:** Proceedings for a revolving fund, referenced as number L4/1150/23/DTE and dated 13.03.2023, have been initiated. The sanction for this fund was received, as indicated in the proceedings outlined below. The resolution of this matter is imminent, with funds expected to be sourced from the PD account of institutions.

Table 4. Revolving fund file flow

Sl.No.	DTE File no and date	Govt File number and date	Remarks
1.	L4/1150/23/DTE dated 13.03.2023		Based on the request from the Principal, GPTC Attingal, to provide revolving fund for IOC activities, sent letter to Higher Education (L), suggested to utilize Production & Training (PAT) Centre plan fund and opening bank account for the purpose
2		HEDN-L1/155/202	Government asked to mention the amount required from plan fund, head of account etc

		3-HEDN dated 11.05.2023	.. Asked to submit revolving fund operational guidelines
3	L4/1150/23/DTE dated 09.07.2023		Constituted committee to form IOC operational guidelines
4	L4/1150/23/DTE dated 11.08.2023		Draft operational guidelines submitted to Govt
5		HEDN- L1/155/202 3-HEDN dated 12.10.2023	Request for opening Bank account cannot be permitted. Govt asked to clarify whether Govt fund is included in PD account
6	L4/1150/23/DTE dated 01.11.2023		Constituted committee to revise the operational guidelines and to check whether Govt fund is included in PD account
7	L4/1150/23/DTE dated 25.11.2023		Letter to Higher Education based on the report from the committee constituted
8		HEDN- L1/155/202 3-HEDN dated 28.12.2023	DTE can take appropriate decision to permit institutions to take advance from PD account
9	L4/1150/23/DTE(1) dated 10.01.2024		Circular to all institutions (Standard Operating Procedure, templates of EOI, MOU and certificate to students)

8. Summary of projects undertaken and revenue generated under IOC so far (Status as on Jan 31st, 2024)

As per our latest statistics, six colleges have actively participated and 14 IOC projects were undertaken. The details of the institutes, revenue generated, products and services developed are given under this section.

Table 5. Total Revenue generated

Sl. No.	College	Revenue generated (INR)
1	GPTC Palakkad	702578
2	GPTC Perumbavoor	275700
3	GPTC Attingal	2499200
4	MTI Thrissur	277375
5	GPTC Nedumkandam	277360
6	KGPTC Kozhikode	45000
7	GPTC Perinthalmanna	16000
Total		40,93,213

Total – Rupees Forty lakh seventy seven thousand two hundred and thirteen only

Table 6. Details of products/ services provided by IOC units and revenue generation

Sl no	Institution	Participating Industry / Organisation	Type of product /Service	Total amount of work orders received (INR)/status
1	GPTC Palakkad	KARD Jal Jeevan Mission project	Community mobilisation model	3,45,000
			Hoardings for 40 Grama Panchat's of Kerala under KARD	Project dropped
		District Panchayath Palakkad	Wastewater treatment plant at FLC TC KINFRA Kanjikod (Novel technology developed by GPTC Palakkad)	3,19,578
		Stalkhind Industries Kanjikod	Power failure monitoring and alert system	38,000

		Ere Bussiness solutions	Website front end documentation works	Agreement not signed
		Axion ventures	e-Autorikshaw and electric scooter assembling, e-Conversion of petrol/diesel autori-kshaw	Agreement not signed
			CNC Training	Under process
		Metrolite	Roofing sheet manufacturing machinery	Agreement not signed
			Total	702578
2	GPTC, Perumbavoor		Trainer kits	245700
			Equipment maintenance cell	30,000
			Lithium ion battery manufacturing	Under process
			CNC training,	
			Arduino training	
			Total	275700
3	GPTC, Attingal	ManoLAB	Agricultural equipment	1,50,000
		Wheo Lab	e-Auto conversion kits developed by GPTC, Attingal	8,00,000
		She-biz	LED video wall manufacturing and installation at 70 Gramapanchayaths of Kerala	1519700 after assembling 28 nos video walls project dropped
		Axeon Ventures	e-Autorikshaw and electric scooter assembling, e-Conversion of petrol/diesel auto-rickshaw	Assembling of 3 Wheeler 4500
			Maintenance cell	25,000

Total				2499200
4	MTI Thrissur	KARD JJM Project	Public awareness system assembling	277375
		TIG Training	TIG welding training	Under Process
4	GPTC Nedumkandam	Socio Economic Unit Foundation	LED Video wall manufacturing unit	277360
		Farmers Grid Green Solutions	Solar dryer manufacturing	Under process
		Traders consortium	Electronic and Electrical equipment service network	Under process
5	KGPTC Kozhikod	E-Auto assembling	e-Autorikshaw for Kozikod corporation assembling,	45000
5	GPTC Kalamassery	Farmers Grid Green Solutions	Inoculum manufacturing unit	Under process
		Nexgen Builders	pre-fab building materials manufacturing unit	Under process
6	GWPTC Nedupuzha Thrissur	Hykon	Electronic PCB assembling	Under process
		MA Skills	Software training and Job works	Under process
7	EKNM GPTC Thrikaripur	eRE Business solutions	Software company	Under process
			Electronic service network	Under process
8	GPTC Kottayam		CNC Training	Under process
9	GPTC Perinthalmanna		CNC Training	Under process
		KSRTC	GPS Installation	16,000
Total				40,93,213

Table 7. Institutions where IOC Units under pipe line

Si No	Institution	Type of IOC
1	GPTC Neyatinkara	Electronic servicing
2	GPTC Cherthala	Laser cutting
3	GPTC Nedumangad	-
4	GPTC Mattanur	Machining job works
5	GPTC Muttom	CNC Machining
6	MTI Thrissur	e- Auto loader bucket manufacturing
7	KGPTC Kozhikod	CNC Machining
8	IPT & GPTC Shornur	Printing
9	GWPTC Kalamassery	PCB Assembling
10	GPTC Palakkad	Bio-diesel manufacturing

9. Significant Achievement during this period

Axeon Venturers, a pioneering e-auto manufacturing company has signed an MOU with Government for associating with Industry On Campus activities in the presence of at Dr. R. Bindu Honourable Higher Education Minister on 31st October 2022. They have successfully associated with Attingal polytechnic in IOC activities and gave training to students assembled three electric three-wheelers, marking the first significant milestone in '**Earn While Learn**' process.

The company focusses on manufacturing electric vehicles that are pollution-free and noise-free with zero-emission.

This visionary partnership has garnered acclaim, securing a notable work order to supply 75 electric garbage vehicles for the Kozhikode Corporation. The assembly hub at KGPT West Hill, Kozhikode witnessed the birth of India's first-of-its-kind electric three-wheeler assembly process, a testament to Government's vision of providing students an exposure to the real industry atmosphere in the institution thus imbibing the spirit of '**Earn While You Learn**'.

Hon' Minister Dr.R. Bindu flagged off the e-autos at a grand ceremony in KGPT West Hill, Kozhikode on 11st Jan . 2024. **This event can be considered as the first major step taken after Directorate of Technical Education took complete charge of IOC activities from ASAP.** It also marks the most important step in academia- industry interaction as we have moved from training to commercialisation, establishing production units in our campuses. It can be considered as a great milestone in the history of Industry On Campus activities and it also upholds Axeon Venturers' commitment to innovation and eco-friendly transportation solutions as well.

This event showcased the synergy among Directorate of Technical Education, Axeon Venturers, Industry On Campus, and Kozhikode Corporation, as they collectively usher in a new era of Earn While Learn and sustainable urban mobility. The Flag Off Ceremony was a symbolic moment, signifying not only the successful collaboration of campus industry leaders but also a significant step toward a cleaner, greener future for transportation in India.

10. Challenges faced and Targeted action required

Based on the interactive session with IOC coordinators held during the One Day Training Program on 1st Dec 2023 and based on the report submitted by Mr. Prason P, Trade Instructor, Pala Polytechnic (who also served under ASAP in the beginning stages of IOC) the issues to be addressed to revitalise IOC activities were identified. These are compiled and given in Table 8. Based on this report DTE has initiated various actions to straighten out IOC activities which got slowed down during the transition phase.

Table 8. Challenges faced and targeted action required in the implementation of IOC

Sl. No.	Issues	Targeted Action/ Officer/Organisation
1.	The machine installers have already completed two years AMC as stipulated in the agreement.	<i>Urgent action required from Directorate for renewing AMC of equipment purchased using ASAP fund. Discussion shall be done with ASAP for renewal/ extension of AMC.</i>
2.	<p>The following items are required for the proper functioning of the machines</p> <ol style="list-style-type: none"> a. Tools (Type and specification may vary as per job requirement) b. Coolant c. Instruments for precision measurement 	<p>Tools for CNC Milling: Central Polytechnic College, Vattiyoorkkavu, Central Polytechnic College, Vattiyoorkkavu</p> <p>Tools for CNC Lathe: Govt: Polytechnic College, Nattakam, Kottayam, Kerala Government Polytechnic College, Kozhikode, Govt: Polytechnic College, Kasaragod, Govt: Polytechnic College, Muttom, Govt: Polytechnic College, Perinthalmanna, GPC Palakkad.</p> <p>Instruments & tools for CNC Lathe: Central Polytechnic College, Vattiyoorkkavu.</p> <p>Coolant for CNC milling: Kerala Government Polytechnic College, Kozhikode.</p> <p><i>Action to be taken from Directorate to enable these institutes to procure these necessary items</i></p>
3.	<p>Maintenance, Repairs & Utilization</p> <p>The following instructions may be given to the staff in charge of CNC machines for ensuring proper functioning and maintenance</p> <p>Online log books</p> <ol style="list-style-type: none"> a. A machine log book (Running hours, Supervising staff details, no and types of 	<p><i>Instructions shall be given in this regard from Directorate to all institutes having machineries procured from ASAP</i></p>

	<p>operation conducted with date and time)</p> <p>b. A maintenance cum preventive maintenance schedule (schedule once in a week or twice in a month, update details maintenance / preventive measures carried out)</p> <p>c. Details of job works done/undertaken</p> <p>d. Evaluate the extent of utilization for educational and practical purposes. (Online feedback form from students)</p>	
4.	Need for training for operating CNC machines	<p>CNC Lathe: Govt: Polytechnic College, Perumbavoor, Govt: Polytechnics College, Palakkad, Govt: Polytechnics College, Kasaragod, Govt: Polytechnics College, Muttom, Central Polytechnic College, Vattiyoorkkavu</p> <p>CNC Milling: Kerala Government Polytechnic College, Kozhikode, Central Polytechnic College, Vattiyoorkkavu</p>
5.	Encourage feedback from the polytechnics regarding the CNC machines' performance and any suggestions for improvement.	<i>Instructions shall be given in this regard from Directorate to all institutes annually</i>
6.	Absence of separate fund for IOC activity	<i>Sources of fund and procedure to be adopted is given in Standard of Procedure issued by Director of Technical Education</i>
7.	Lack of clarity regarding the account for managing financial affairs, the criteria for expenditure	<i>Standard of Procedure issued by Director of Technical Education to be referred</i>
8.	Possibility of receiving of government grants, and procedure for startup/ industry registration.	<i>To be addressed by Directorate of Technical Education</i>

9.	Limitations of space and building for IOC projects and for expanding industry related activities	<i>To be addressed by Directorate of Technical Education</i>
10.	Difficulties in continuing activities when the concerned teachers transferred were discussed.	<i>Directorate of Technical Education to formulate some mechanism in this regard</i>
11.	Need for proper directions regarding maintaining accounts, and need for GST filing.	<i>Standard of Procedure</i> issued by Director of Technical Education to be referred
12.	To classify institutes based on core competency	<i>State IOC coordinators</i>
13.	Identification of skilled teachers with technical and industrial backgrounds and leverage their skills to design and implement IOC projects for polytechnics across the State	<i>State IOC coordinators</i>
14.	To organize necessary workshops and industry visits to ensure necessary professional training and industry exposure to faculty and students working in connection with industry on campus.	<i>Institute IOC coordinators with support of State IOC coordinators</i>
15.	Identify three polytechnics from three regions (South, North and Central Kerala) considering land availability and industrial potential and develop infrastructure and related facilities using NABARD funds to set up industrial parks in those campuses. The projects for this can be accepted from the institutions this year and submitted to the government. GPTC Palakkad, GPTC Kalamassery and GPTC Attingal are potential institutes for this.	<i>Institute IOC coordinators with support of State IOC coordinators and Directorate of Technical Education</i>

16.	Steps can be taken to provide MSME recognition and subsidized funds under the supervision of the Industrial Department in these Industrial Parks.	<i>State IOC coordinators to assist Directorate of Technical Education</i>
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11. Conclusion

Industry on Campus (IOC), the flagship program initiated by Govt. of Kerala is being facilitated by the timely, sincere and dedicated staff of various Polytechnic colleges with active support from Directorate of Technical Education. Though it was limping a bit during the transition phase, now it is in the path of progress with the timely and effective involvement of DTE. This has helped to instill new energy into IOC activities across State and more and more institutes are coming forward to be part of this network.

We humbly request to extend the activities of Industry on Campus to more institutions ie. Government as well as Aided/autonomous Engineering Colleges and all Polytechnic colleges under Higher Education Department if possible. Steps may also be taken to motivate and encourage institutions in the self financing sector as well. Together these efforts with support from Dept. of Higher Education, Govt. of Kerala will make visible impact on our State and boost its economy.