Ref/ Dir/23/2019

27th Aug'19

# OFFICE ORDER: 23 / 2019 Re-Organisation of Innovation Centre & Technical Clubs

- In order to achieve desired results as expected from respective clubs of Departments, Centres of Excellence & Innovation Centre, revised guidelines alongwith restructured clubs, role and responsibilities have been formalized. The same will facilitate effective and efficient skilling and knowledge enhancement of all students towards application oriented learning in these clubs/ Innovation Centre in the form of Product Development.
- 2. A major change is to dispense with 'Departmental Club / Centre of Excellence' nomenclature. All clubs /Centres of Excellence operating under the departments will now be known as 'Institutional Clubs / Institutional Centres of Excellence'. However, responsibilities to run the same shall be of respective department where it is located.
- 3. Further, a rationalised view of all clubs has been undertaken to ensure that there is no duplicity of clubs between Innovation Centre / departments. Accordingly, fresh list of technical clubs operating with Innovation Centre, Institutional club and Institutional Centres of Excellence is attached for information of all concerned (Appendix A& B). No technical club other than this list will have official recognition by KIET Group of Institutions.
- 4. Guidelines for functioning of Institutional clubs & Innovation Centre will be as follows:-

#### (a) Institutional Club

- (i) These clubs will run at institutional level under the control of respective HoDs. Support of Head- Innovation Centre, wherever required can be taken. Students from other departments can also register in these clubs. The objective of these clubs is to train students for basic knowledge/ up skilling in specific technological domain.
- (ii) Registration for students will be performed by respective HoDs from all departments in prescribed registration form, which is given in **Appendix C**.
- (iii) Faculty coordinator will be nominated by respective HoDs who will run the club and maintain the records. Other faculty members may also join the clubs as per their interests.
- (iv) Head-Innovation Centre may also include any student from Innovation Centre, if required by using registration form at Appendix C.
- (v) Minor/Major projects or products to these clubs to be assigned by HoDs. The need based or market driven project/ projects for various competitions may also be taken up by any faculty member after getting approval from respective HoDs. If required, Head IC may assign the projects in consultation with respective HoDs.



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- (b) Innovation Centre (Product Development Club)
- (i) Registration for students will be performed by Head-IC from various departments in prescribed registration form, which is given in **Appendix C**.
- (ii) Faculty coordinators have already been nominated by HoDs as mentioned in Appendix-B.
- (iii) This club will focus on grooming students from 3<sup>rd</sup> semester onwards for developing product & services, which can be commercialized or may be used by the client.
- (iv) Head-IC will run these clubs under the supervision of Dean- IEC and may also take help from faculty members/ HoDs as and when required.
- (v) Few relevant details pertaining to Innovation Centre are attached at Appendix D.
- 5. Industrial project/ customized project as developed by Institutional Clubs may take necessary support of Innovation Centre and vice-versa.
- 6. Reporting of Activities: The feedback on the Institutional Clubs/Centres of Excellence / Innovation Centre clubs shall be as per the Appendix E on the days mentioned below:-
  - (a) Odd Sem September (last week) & November (last week)
  - (b) Even Sem February (last week) & April (last week)
- 7. **Flexible Timing**: The facility of flexible timing will be provided to the faculty coordinators of Technical clubs as follows:
  - (a) 9:00 am to 5:00 pm.
  - (b) 10:30 am to 6:30 pm.
  - (c) 12:00 noon to 8:00 pm.

It will be ensured that approximately 50% of faculty Coordinators from respective department are available beyond 5 pm on select working days depending on the student's availability. HoDs in consultation with Dean IEC will assign the slots to their faculty Coordinators for *Innovation Centre clubs/ Institutional Clubs / Centres of Excellence* accordingly.

- 8. The revised structure will be implemented with immediate effect.
- 9. The circular dated 05/12/2018 hereby stands superseded.

Dr. (Col) A Garg Director

#### Distribution:

Joint Director/ Deans / Principal-KSOP/ HODs (CS/IT/EC/EN/EI/CE/ME/AS/MCA/MBA/HS/CO/CSI) GM-TBI & Dean IEC, Head-CRPC, Head-CAM, Head-AEC, Head-IRCDC, Head – IC, Addl. Head IIPC, Chairperson-ICC, Manager-ITSS, Manager-IA, Manager-HR, Registrar, Admin Officer, Accts Officer, Librarian, Purchase Officer, Central Lab, KIETians

# APPENDIX - A

**Institutional Clubs run by various Departments** 

s.N	Department Name	*Name of Institutional Club	Faculty Coordinator	Location  Central Lab ITSS Department	
1	ITSS (1)	Creative Cell and ERP	Mr. Vinay Ahlawat		
2	TBI (1)	TBI Incubation Cell	Prof. Ashish D Thombre & Mr. Awadhesh Kumar **Volunteer faculty	TBI Room F-11	
3	CRPC	Koder's Korner	Mr. Arvind K Sharma	CRPC block	
4	ECE (2)	Dianabots	Mr. Neelesh Ranjan Srivastava	TBI	
		E-Yantra	Mr. Amit Bohra	F Block Room 115	
5	ME (3)	KIET Design Club	Mr. Sachin Rathore	C-108	
		SAE India	Mr. Tuhin Srivastava Mr. Ashish Singh	Workshop	
		Material and Metallurgy Club	Dr. Anurag Gupta	Ground Floor Material Science Lab	
6	IT (1)	Innogeeks	Mr. Dinesh Kumar	E-311	
7	CS (2)	KIET Block Chain(CS+MCA+IT)	Dr. Pramod Yadav	E - 503	
		Google Students Developer Club	Prof. Sanjiv Sharma	CSE Dept. Lab	
		SYS-Matic	Mr. Piyush Ojha	F Block -201	
8	EI (2)	Instronix	Mr. Sharad Gupta Mr. Salim Khan	F Block -201	
9	EN/EC/ME (1)	Matlab/Ansys	Mr. Shiv Sikarwar	C-111	
10	CE (1)	CIVEC	Mr. Hemant Kumar Gupta	E-108	

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11	EN (4)	Bot & Electric Vehicle Club	Prof. Ankit Singhal Dr. Arvind Kr. Sharma	C-218 Power Electronics Lab
		Socio Tech. Innovation Club	Prof. Rahat U Khan	C-212, Power System Lab
·		Industrial Electronics & Control Club	Prof. Ashish Thombre & Prof. Anil Kumar	D-Block basement
		SIGHT	Dr. Neeraj Kr. Gupta	CAD Lab C-111
12	Pharmacy (2)	Pharmacy Innovation Club	Mr. Anuj Pathak	F Block KSOP
		Ayushman Club	Mr. Anuj Pathak	F Block KSOP
	MBA (5)	Capital Market	Dr. Prateek Gupta	Finance Lab II Floor Room No. 206
		Marketing Club	Dr. Mani Tyagi	General Lab II floor Room No. 201
13		HR Club	Dr. Shivani Agarwal	HR Lab III Floor Room No. 302
		General Management	Dr. Ranchay Bhateja	General Lab II floor Room No. 201
		Marg ERP	Dr. Mrinal Verma	HR Lab III Floor Room No. 302

<sup>\*</sup> This is an Institutional body and not a club. All Clubs in this policy or those with Dean-SW i.e. extracurricular activities can take the support of this Institutional body.

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<sup>\*\*</sup> Few volunteer faculty members from different departments having Industrial exposure may be deputed as Consultant & provided a place in TBI. A slot of 2-4 hours workload may be allotted in their timetable as consultancy to TBI after due approval of concerned HoD.

### APPENDIX - A

### **Institutional Centre's of Excellence**

S.N	Department	epartment Name of Excellence Centre Faculty Coordinates		Location	
1	ECE (2)	Centre of Robotics & Mechatronics	Mr. Shubham Shukla	F-Block - 115	
		KIET NI Labview Academy	Dr. Praveen Kaushik	B - 106	
	ME (3)	Center of Automotive Mechatronics	Dr. Ashish Karanwal	A- Block	
2		CAD/CAM	Mr. Ranjeet Kumar Mr. Ashish Sharma	F-Block	
		Material Science and Testing Lab  Dr. Anurag Gu		Ground Floor (ME department)	
3	IT (2)	IT		Ms. Nidhi Goyal	E-311
		D-link Lab	Dr. Surendra Kesri	E - 306	
4	EI (1)	Process Control and Industrial Automation	Mr. PiyushOjha	F Block - 201	
5	CE (1)	Structural Analysis and Design	Dr. S.K Singh	E Block - 106	
6	EN (1)	Centre of Excellence for Power Engineering Technology and Clean Energy Integration	Dr. Brijesh Singh	A Block Room No. 16	



### APPENDIX-B

**Innovation Centre Product Development Club** 

S.N	IC Club	Club Nick Name	Faculty Coordinator	A Block Room 15	
	Prototype and Product Maker (KIET Product Innovation Centre)	KPIC	Mr. Himanshu Sharma - ECE Mr. Salim – EIE Prof. Ankit Singhal - EN		
2.	IP, BMI & Process Invention (Theory of Inventing problem solving)	TIPS	Dr. Puja Roshni - MBA	A Block Central Lab 2	
3.	User interface, user experience and user interaction design	Mosaic	Mr. Ankit Verma (MCA)	A Block Room 206	
4.	IoT (Digital input output system)	DIOS	Prof. Ankur Bhardwaj - CSE Mr. Sharad Gupta - EIE Prof. Anil Kumar - EN	A Block Room 17	
5.	Augmented reality	Sensorama	Prof. Neha Yadav - CSE	G Block Room 113	
6.	Chip designing (RTL to Netlist and physical design – floor planning	DEUCE	Mr. Rakesh Kumar - ECE	A Block Central Lab 1	
7.	Artificial intelligence and machine learning	Mycine	Mr. Nilesh Kumar – CSE	E Block Room 411	
8.	Data Science, Business Analytics Visualization	InSight	Prof. Nitin Kumar - IT	A Block Room 206	
9.	Game Creator	Trans-Raptor	Prof. Aman Jolly - CSE	G Block Room 113	
10.	Flying objects drone creators	iNav	Prof. Alok Kumar - CSE Mr. Amit Kumar - ECE	A Block Room 17	
11.	Server architecture, Network security and ethical hacking	work king SAGE Prof. Seema Maitrey - CSE Mr. Layak Singh		A Block Room 207	
12.	3D Designing, CAD Modeling	Pronto	Mr. Shubham Kumar - CE	G Block Room 102	

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# APPENDIX - C

### <Department Name>

### **Registration Form**

Institutional Club / Innovation Centre (Product Development Club)

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Handed Over to (Faculty Coordinator)	
(Signature for Approval)	
HOD	
	Student Signature
Club Type (Institutional / IC Product Development Club):	
Club Name:	
Previous experience /Projects developed	
E-Mail ID:	
Mobile No:	
Section:	
Semester:	
Department Name:	
Father Name:	
Student Name:	

#### APPENDIX-D

#### **Innovation Centre Brief**

#### Introduction

- 1. The new world order, brought on by the fourth Industrial revolution demands that today's students acquire skills that will serve them well in the future. Although, 21<sup>st</sup> century will bring automation of most routine jobs, robots and algorithms will not be able to match the depth & breadth of human perception. As all these trends happen, the winners will be those who are able to participate fully in innovation driven ecosystems by providing new ideas, business models, products and services.
- 2. In alignment to above, Innovation Centre is conceptualized with a mission to promote outcome-based learning for students which will include learning by making market ready projects and developing deeper understanding of the subject specifically in student's own interest area. Primary objective of this initiative is to make their learning experience joyful while keeping the greater emphasis on developing skilled and job ready engineers in all the technical domains.
- 3. Also realizing present industry requirements, to complement the existing university syllabus, there is a tremendous need to upskill our students with current technologies in practice as well as the emerging technologies. Thus, there is a need to facilitate students with latest academic software, prototyping machines, tools and enough materials to enable them make products which have potential to be market ready.

#### Mission and Objective

- 4. There is a need to have a system to track learner's trajectory and move towards personalized learning methodologies. Thus, a dual strategy of combining both online and offline media to understand the learner's motivation has been adopted duly mapped to the present industry requirements and facilitate enough practice to help students gain required skills in their area of interest while keeping them informed about opportunities in their chosen skills.
- 5. This Innovation Centre' based learning model is aimed to serve following three stakeholder groups.
  - (a) First, Industry leaders desire to have more talented, creative and well-rounded engineers who were better prepared for innovative work.
  - (b) Second, students desire to have a richer, practice-based curriculum to augment their theoretical knowledge and make them more competitive in the job market.
  - (c) Third, faculty desire to connect their research with real-world problems and industry needs.

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- 6. All this will be facilitated by Innovation Centre which is a maker-space and will be one of its kind in India. The *organization structure* of this student driven centre is attached. This centre will facilitate students with sufficient prototyping tools that include 3D Printers, CNC machines, Laser cutters, powerful PCs, necessary electronic components and other workshop hand tools. It will be a multi-disciplinary lab intended to promote collaboration of students of different branch and year based on resource sharing, team work and co-creation.
- 7. Operations of Innovation Centre will be done in such a manner so as to empower students. This will be managed by forming almost 12 clubs each having over 50 students. These clubs will be based on emerging technological skill areas and will constitute students of different domains. Objective of these clubs will be to connect like-minded students allowing them to discuss and build innovative product and services in their domains. It will also evaluate their training needs, material requirements and most importantly thinking about their future and making it happen. Club leadership will be expected to cooperate and support in organizing the webinars, trainings and workshop. In order to understand the strength, interest areas and the role students wish to perform in various clubs, an online survey has been developed and is available on link innovatecraft.com/cis/tc/.

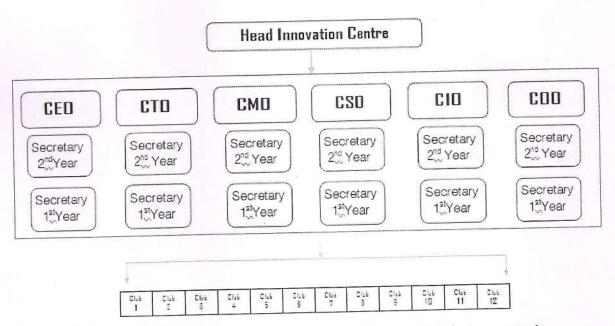
#### Conclusion

- 8. The establishment of Innovation centre represents an effort to support "bottom-up" student focused operation or grassroots student engineering and facilitate the pursuit of extracurricular personal projects and the exploration of manufacturing techniques.
- 9. At Innovation Centre, one of our primary targets will be to organize boot camps, mentoring and investor sessions and holding entrepreneurship focused events at the Institute where successful entrepreneurs and industry experts will be invited to interact with students. This is in line with recent UGC recommendations for all universities to organize such events.
- 10. We aim to promote hands-on learning for enrolled engineering students and also to support theoretical coursework. Additionally, the facilities build will serve as places of outreach and engagement with the non-engineering community. Other stated goals included enhancing creativity, team-oriented problem solving, and multidisciplinary collaboration skills, goals which address industry needs for graduating engineers to have such skills. The Innovation Centre will be providing meeting spaces for student design teams and integrating typical machine shop tools with a wider variety of rapid prototyping and low-tech building approaches. The establishment of the space answers a call to improve engineering education and to train engineers to engage increasingly complex challenges.

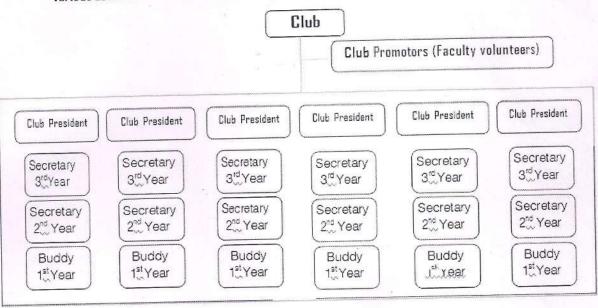
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# Organization Structure - Student Driven Centre



At club level, interested faculty members may get involved to support students as mentor in various activities based on their area of expertise or interest.



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#### APPENDIX - E

## <Department Name>

#### Feedback Report

Institutional Club / Innovation Centre (Product Development Club)

S.NO	Club Name	Project Name	Students Name	Faculty Coordinator	How Much Completed (in %)
					70

**HOD/Head-IC** 

(Signature)

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