Karnataka German Multi Skill Development Center
KGMSDC Bangalore

Guidelines and regulations for One-year 'Post Graduate Certificate Program' AT KGTTIs

Contents

- **Proposed Guidelines for 'Post Graduate Certificate Program' in various specialization for approval**

Karnataka German Technical Training Institute (KGTTI), A Government of Karnataka Undertaking,
KGTTI Locations
Bengaluru, Kalaburagi, Belagavi, Mangaluru, Hubballi, Mysuru, Karkala and Gouribidanur

Society for

KARNATAKA GERMAN MULTI SKILL DEVELOPMENT CENTER

A Government of Karnataka Undertaking

KARNATAKA GERMAN TECHNICAL TRAINING INSTITUTE
COMMON CURRICULUM GUIDELINES
For
POST GRADUATE CERTIFICATE PROGRAM
PGCP

Aligned To
VTU & AICTE

1. Salient features concepts of Post Graduate Certificate Program curriculum:

a) KGTTI under KGMSDC (Karnataka German Multi Skill Development center) formed by the Government of Karnataka and Central Government under Technical guidance from the GIZ Germany has created many Multi Skill Development training centers in Karnataka which offers high technology industry oriented short term courses and long term courses of Three year Diploma in Tool and Die Making affiliated to AICTE and DTE. This curriculum model is prepared to offer Post Graduate Certificate Program affiliating to VTU with its own developed Course Curriculum as per model curriculum of AICTE and guidelines of VTU.

b) AICTE has developed Model curriculum which are to be followed by all the Institutions offering the various courses at Diploma, Graduation and Post Graduate Certificate Program Courses in various engineering fields. There is no specific curriculum developed for the Post Graduate Certificate Program by the AICTE. Many State Governments and Universities and private sector institutions run the Post Graduate Certificate Program at various locations in the country, following their own Curriculum under various Universities.

c) Post Graduate Certificate Program proposed by KGMSDC involves high and latest technological and industry oriented areas of specialization in various engineering disciplines. KGMSDC has evolved Post Graduate Certificate Programs in alignment with VTU and AICTE curriculum structure.

d) While maintaining the alignment to AICTE; Competency and outcome based education and choice based credit system detailed curriculum is widely adopted to meet the NSDC Qualification Packs QPs, National occupational standards NOS and in alignment with the different levels of NSQF The curriculum meets the requirements of the AICTE. The curriculum is also aligned to the NSQF level 6 and aligned to applicable NSDC Qualification Packs QP's and NOS

e) As per the model curriculum of the VYU and AICTE; the Credit system, Evaluation System, Mapping of marks to Grades, Semester wise Structure of Curriculum, Structure of the detailed curriculum and Structure of description of the contents are followed to maximum extent as detailed in the respective chapters.

f) As per the model curriculum of the AICTE Project work, Seminar and internship in the industry are followed.

g) Program Core Courses [PC] have been extensively changed to meet the structure of the VTU and AICTE, requirements of the industry and study of Post Graduate

PAGE 3

KGMSDC: Karnataka German Technical Training Institute KGTTI, A Government of Karnataka Undertaking,
Behind Kenna Metals, Nagasandra, Manjunatha Nagar, Bengaluru – 560 073,
Also at: Kalaburagi, Belagavi, Mangaluru, Hubballi, Karnataka State.

Certificate Program; keeping the curriculum of existing core subjects being taught in the KGTTI-KGMSDC benchmarking with other industry partners and institutions. Branch code for the Post Graduate Certificate Program is followed as PGCP for its exclusive courses.

h) Two semester course credits a total of about 40 units are planned to match with the AICTE requirement

i) Well defined learning objectives & outcomes for each course are defined

j) To the extent possible, the weightage of theory and practical (in terms of contact hours) has been balanced.

k) Induction Program suggested by the AICTE is aligned with the KGMSDC practice

l) One mandatory internship to equip the students with practical knowledge and provide them exposure to real time industrial environments.

m) A list of experiments, with the objective clearly spelt out, is specified for each lab course

n) Provision of organizing at least one expert lecture per semester for each branch by inviting resource persons from domain specific industry is proposed

o) Course on Entrepreneurship and Startups is introduced to encourage entrepreneurial skills.

p) This curriculum is expected to enhance employability skills in the very process of teaching-learning,

q) Develop well trained Engineers who have the knowledge and the skills to engineer solutions for real-world problems.

r) The New Curriculum has been designed to better meet the needs of the industry considering evolving technological trends and implications for the engineering workforce. To meet its objectives KGTTIs are actively partnered with various industries

2. Contents

3. Post Graduate Certificate Program system:

3.1. Post Graduate Certificate Program:

This is an educational program in a particular stream/ branch of Engineering/branch of specialization leading to the award of a PG Certificate jointly by VTU and KGMSDC. It involves events/activities, comprising of lectures/ tutorials / laboratory work/ field work, outreach activities/ project work/ vocational training/ viva/ seminars/Internships/ assignments/ presentations/ self-study etc., or in a combination of some of these.

3.2. Academic Year and Semester

Academic year Refers to the sessions of two consecutive semesters (odd followed by an even)

Including periods of vacation. Semesters Refers to one of the two sessions of an academic year

Each semester is of sixteen weeks duration (with working greater than or equal to 90 days). The odd semester (First Semester) shall be scheduled from August and the even semester from February of the academic year.

3.3. Unit credit

Credit: Refers to a unit by which the Course work is measured. It determines the number of hours of instructions required per week in a semester consisting of 16 weeks. One credit is equivalent to one hour of lecture/tutorials or two hours of laboratory/practical Courses, fieldwork per week in one semester.

1 Hr. Lecture per week in one semester	(L)	1 credit
1 Hr. Tutorial per week in one semester	(T)	1 credit
2 Hours Practical per week in one semester	(P)	1 credit

Three credit Courses are designed for   45-50 hours Teaching – Learning process.
Two credit Courses are designed for   25-30 hours Teaching – Learning process.
One Credit Courses are designed for   15-20 hours Teaching – Learning process

3.4. Total Credits for Post Graduate Certificate Program:

In the light of the fact that a typical Model the total number of credits proposed for the Post Graduate Certificate Program is 40 credits as per guidelines from AICTE, UGC and VTU.

3.5. Category of Course code and definition:

Course: Refers to usually referred to as 'papers/subjects' and is a component of a program. All Courses need not carry the same weight. The Courses should define learning objectives and learning outcomes. A Course may be designed to comprise lectures/ tutorials/ laboratory work/ field work/ outreach activities/project work/ vocational training/ viva/ seminars/ term papers/assignments/ presentations/ self-study etc., or a combination of some of these.

Course code	Definitions
HS	Humanities & Social Sciences Courses
ES	Engineering Science Courses
PC	Program Core Courses
PE	Program Elective Courses
OE	Open Elective Courses
AU	Audit Courses
SI	Summer Internship

PR	Project
SE	Seminar

3.6. Structure of Post Graduate Certificate Program:

- The structure of Post Graduate Certificate Program shall have the following categories of courses with the breakup of credits as given

SI. No.	Category	Suggested Breakup of Credits*
1.	Program Core courses (Branch specific)	18
2.	Program Elective courses (Branch specific)	4
3.	Open Elective courses (from other technical and /or emerging subjects)	2
4.	Project work, seminar and internship in industry	16
5.	Audit Courses: Entrepreneurship and Start-ups, Induction training, Indian Constitution, Essence of Indian Traditional Knowledge etc.]	(non-credit)
	Total	40*

*Minor variation is made to align it to Post Graduate Certificate Program which is allowed by AICTE asper need of the discipline.

3.7. Description of Post Graduate Certificate Program, Branch Codes

SI. No.	Code	Branch
1.	PGCPNE	Post Graduate Certificate Program IT Networking Engineering
2.	PGCPCC	Post Graduate Certificate Program in CAD CAM Engineering
3.	PGCPIA	Post Graduate Certificate Program in Domestic and Industrial automation Engineering
4.	PGCPFW	Post Graduate Certificate Program in Fabrication and advanced welding Engineering
5.	PGCPHA	Post Graduate Certificate Program in HVAC engineering

3.8. Three-digit number

Three-digit number (odd numbers are for the odd semester courses and even numbers are for even semester courses) used as suffix with the Course Code for identifying the level of the course e.g.

101, 102 … etc. for first semester
201, 202 … etc. for second semester

3.9. Courses coding scheme examples:

Course Code Example	Branch code	Category Of Course	Semester wise Serial numbers	
			First semester	**Second semester**
PGCPHA-PC101 Post Graduate Certificate Program in HVAC engineering	HA	PC Program Core Courses	101 First semester	
PGCPNE-PC201 Post Graduate Certificate Program IT Networking Engineering	CN	PC Program Core Courses		201 Second Semester

4. Category-wise Courses
4.1. Induction Program

The Essence and Details of Induction program can also be understood from the 'Detailed Guide on Student Induction program', as available on AICTE Portal, although that is for UG students of Engineering & Technology. KGMSDC follow the same with minor changes to suit the course requirements.

Link:
https://www.aicteindia.org/sites/default/files/Detailed%20Guide%20on%20Student%20Induction%20program.pdf

Induction program (mandatory)	8 days duration
Induction program for students are offered right at the start of the first Semester	Physical activity Creative Arts Universal Human Values Literary Proficiency Modules Lectures by Eminent People Visits to local Areas Familiarization to Dept./Branch & Innovations

4.2. Mandatory Visits/Workshop/Expert Lectures:

a.   It is mandatory to arrange one industrial visit every semester for the students.
b.   It is mandatory to conduct a One-week workshop during the winter break after fifth semester on professional/ industry/ entrepreneurial orientation.
c.   It is mandatory to organize at least one expert lecture per semester by inviting resource persons from domain specific industry

4.3. Project Work, Seminar And Internship In Industry or Elsewhere

Sl. No.	Code No.	Course Title	Hours per week			Semester	Credits
			L	T	P		
1	SI101	Internship – I (2 weeks) after I Semester				I	2
2	PR101	Major Project: Design and Establishment	0	0	6	I	3
3	PR201	Major Project: Design and Establishment	0	0	8	II	4
4	SE201	Seminar	1	0	0	II	1
Total Credits							10

Note:

- SI101 should be undertaken in industry only. The internship shall be carried out in any industry/R&D Organization/Research
  - Institute/Institute of national and international repute/recognized national and international Professional Bodies, Societies, or Organizations.
  - The Department/college shall nominate a faculty to facilitate, guide and supervise students under internship.
  - The students shall report the progress of the internship to the internal guide at regular intervals and seek his/her advice.
  - The Internship shall be completed during the period specified in the Scheme of Teaching and Examination.
  - After completion of the Internship, students shall submit a report to the Head of the Department with the approval of both internal and external guides.
  - There will be 50 marks for internal exam (Seminar: 20, Internship report: 30) and 50 marks for Viva – Voce
  - The internal guide shall award the CIE marks for the seminar and internship report after evaluation. He/she will also be the internal examiner for Viva – Voce conducted during SEE.
  - The external guide from the industry shall be an examiner for the Internship vivavoce examination. Viva-Voce on internship shall be conducted at the

college and the date of Viva-Voce shall be fixed in consultation with the external Guide. The Examiners shall jointly award the Viva - Voce marks.

- In case the external Guide is not available or expresses his inability to conduct viva voce, the Chief Superintendent shall be permitted to make alternate arrangements. The examiner, in the order of preference, shall be an industry person or a faculty of another institution chosen from the list of university examiners. The same shall be intimated to the concerned BOE Chairperson and Registrar (Evaluation).
- In case the external Guide accepts to conduct viva-voce examination from
- his/her workplace, it shall be arranged via Video/web conferencing/Webinar. The external Examiner shall send the mutually agreed signed marks (evaluated for SEE marks) list, soon after the examination, via email/any electronic media.
- The students shall be permitted to carry out the internship anywhere in India or abroad. The University shall not provide any kind of Financial Assistance to any student for an internship

- PR 101 and PR201 should be based on real/ live problems of the Industry Sector or an innovative idea having the potential of a Startup
    - The project is one of the heads of passing.
    - Project work shall preferably be on an individual basis.
    - The candidate shall submit a soft copy (CD) of the dissertation work to the University.
    - The CD should contain the entire Dissertation in monolithic form as a PDF file (not separate chapters).
    - The Guide, after checking the report for completeness shall upload the Dissertation along with the name, University Seat Number, address, mobile number of the candidate, etc., as prescribed in the form available on the online Dissertation evaluation portal. The guide shall submit a panel of four approved University Examiners for evaluation of the dissertation.
    - All other related guidelines will be as per VTU PG courses
- SE201 Seminar full detailed design and implementation project with report and one hour presentation. Individual projects are to be encouraged; two students max. in a group are allowed for bigger projects.

PAGE 10

KGMSDC: Karnataka German Technical Training Institute KGTTI, A Government of Karnataka Undertaking,
Behind Kenna Metals, Nagasandra, Manjunatha Nagar, Bengaluru – 560 073,
Also at: Kalaburagi, Belagavi, Mangaluru, Hubballi, Karnataka State.

4.4. Audit Courses [AU] (Mandatory Non-Credit Courses.)

Can be organized as full day workshop online course by VTU

Sl. No.	Code No.	Course Title	Hours per week			Semester	Credits
			L	T	P		
1.	AU102	Environmental Science	2	0	0	I	0
2.	AU102	Essence of Indian Knowledge and Tradition	2	0	0	I	0
3.	AU20I	Indian Constitution	2	0	0	II	0
4.	AU202	Entrepreneurship and Start-ups	3	1	0	II	0
Total Credits							0

4.5. Instructional Strategies

The following instructional strategies are to be equipped and followed for the delivery of the Post Graduate Certificate Program curriculum.

- Curriculum /lesson delivery plan
- Induction Program
- Teaching
- Discussions
- Showing charts
- Presentations through PPT
- Expert Guest lectures for industry orientation
- Text and Reference books
- Model question paper
- Question bank
- Internet access and Web learning
- Library and Digital contents
- Computer and IT support
- Video /movies
- Workshop machineries and laboratories
- Demonstrations
- Conduct experiments and research
- List of software/learning websites
- Simulation software
- Industrial visits
- Expose to real life industries situation
- Expose to industry procedures
- Quiz
- Subject related activities
- Technical talk by student
- Seminars
- Project work and report preparation

Course wise specific strategies are to be prepared by the faculty member and explained to the students at the beginning of the course. They are to be followed and monitored on a regular basis.

5. Evaluation Scheme:

5.1. For Theory Courses:

Weightage:

- The weightage of internal assessment is 50%
- The weightage of End Semester Exam is 50%
- The student has to obtain at least 50% marks individually both in internal assessment and end semester exams to pass.

Basis of Evaluation:

- Internal assessment: Total of best two out of three Internal assessment test conducted on syllabus covered during the period through assignment on multiple choice, true/false, matching, short answer questions with test duration of one hour each: 25x2=50 marks, pass marks 25
- Semester End examination: (covering entire syllabus) through combination of essay, descriptive, explanatory, problem solving, case study type of questions; conducted for three hours duration for 100 marks with weightage 50 %= 50 marks. Pass marks 25
- Evaluation report will be prepared for 100 marks each for all theory subject/course.
- Total of all the courses will be recorded.

5.2. For Practical Courses:

Weightage:

- Weekly assessment 25%
- The weightage of mid semester test is 25%
- The weightage of end semester practical Exam is 50%
- The student has to obtain at least 50% marks individually both in internal assessment and end semester exams to pass.

Basis of Evaluation:

There will be 3 to 4 practical courses planned per semester. Every course will have the following pattern of assessments.

- Weekly assessment of quality of work, methods followed documentation and report submissions, punctuality and attitude, average of all weekly assessments. 25 marks
- Mid semester practical test: Planning, scheduling of the process (Written), Quality of work, fit and function. 25 marks
- End semester Examination: Planning, scheduling of the process (Written), Quality of work, fit and function. 50 marks
- Evaluation report will be prepared for 100 marks each for all practical course
- Total of all the practical courses will be recorded.

5.3. For Summer Internship / Projects / Seminar etc.

Weightage:

- The weightage of internal assessment is 50%
- The weightage of End Semester Project report/seminar presentation is 50%
- The student has to obtain at least 50% marks individually both in internal assessment and end semester project report/seminar presentation to pass.
- Basis of Evaluation:
- Work done 30 marks
- Quality of project report 30
- Performance in project Presentation 20 marks
- Performance in viva-voce 20 marks

6. Mapping of Marks to Grades

Each course (Theory/Practical) is to be assigned 100 marks, irrespective of the number of credits, and the mapping of marks to grades may be done as per the following table:
Letter Grade: It is an index of the performance of students in a said Course. Grades are denoted by letter grade O, A+, A, B, B+, C and F.
Grade Point (GP): Refers to a numerical weightage allotted to each letter grade on a 10-point
Scale.
Letter Grade and corresponding Grade Points on a typical 10 – Point scale, and % of Marks secured relationship

Range of Marks %	Letter Grade		Grade Point
90-100	O	Outstanding	10
80-89	A+	Excellent	9
70-79	A	Very Good	8
60-69	B+	Good	7
55-59	B	Average	6
50-54	C	Pass	5
0-49	F	Fail	0

If a student remains absent for Semester end examination (SEE) of any of the course/s, the letter grade assigned to that course shall be **F.**

Passing Standards: Refers to passing a Course only when getting GP greater than or equal to 5 (Grade letter C)

A student who obtains any grade O to C shall be considered as passed and if a student secures F grade in any of the heads of passing, he/she has to reappear in that head for the SEE.

A student shall be declared successful at the end of the Programme for the award of a Degree only on obtaining CGPA ≥ 5.00, with none of the Courses remaining with an F Grade.

7. Attendance

- The candidate has to put in a minimum attendance of 85-90 % in each course with a provision to condone 15-10 % of the attendance by the Vice-Chancellor on the specific recommendation of the Principal of the college where the candidate is studying, based on medical grounds, participation in NSS/NCC/Red Cross /Republic Day and Independence Day parades/University/ State/ National/ International level sports and cultural activities, seminars, workshops, paper presentation etc., of significant value. The necessary documents in support are to be submitted along with recommendations to condone the shortage

8. Eligibility for Admission

(As per the Government orders issued from time to time)

- Admission to I semester Post Graduate Certificate Program shall be open to all the
- Candidates who have passed AMIE/ Graduation in Science of min 3 years duration/ B.E./ B. Tech. Examinations of VTU or any other recognized, University/ Institution with not less than 50% of the marks in the aggregate of all the years of the degree examination. However, in the case of candidates belonging to SC/ST and Category I, the aggregate percentage of marks in the qualifying examinations shall not be less than 45%. Rounding off of the percentage secured in the qualifying examination is not permissible. (Reservation is applicable only for Karnataka Candidates).
- The intake under various categories (regular, sponsored candidates, and SC/ST) shall Be as sanctioned by the AICTE, State Government, and VTU, from time to time.
- The decision of the Equivalence committee shall be the final in establishing the eligibility of candidates for a particular Program.
- For foreign degrees, an Equivalence certificate from the Association of Indian
- Universities shall be a must.
- The candidates who have completed their degree through distance education from any University (National or International) are not eligible for admission to. Post Graduate Certificate Program under any quota.
- For admissions under the GATE/ PGCET qualification and Roaster system of the
- Government of Karnataka: The candidates should be GATE qualified or should have appeared for the Entrance Examination conducted by an authority recognized by the Government of Karnataka
- The candidates should be GATE qualified or should have appeared for the Entrance Examination conducted by an authority recognized by the Government of Karnataka PGCET/VTU
- If a sufficient number of GATE-qualified candidates are not available, the remaining Vacant seats shall be filled from amongst the candidates who appeared for the Entrance Examination in the order of merit
- Unfilled seats shall be filled as per the guideline issued /notified by the government of Karnataka from time to time. OR Seats remaining vacant (unfilled), after the completion of PG admission process by Karnataka Examination Authority, shall be filled by the Institution by inviting applications through Press notification. The seats shall be filled by Candidates preferably who have valid GATE/ PGCET scores. In the absence of such Candidates, admission shall be based on merit in the entrance test conducted at the Institution level. An Admissions Committee, consisting of the Principal of the College, the Head of the concerned Department, and the subject experts, shall be in charge of admissions.

9. First Semester Curriculum Structure Format

Sl. No.	Category of Course	CodeNo.	Course Title	Hours per week			Total contacthours /week	Credits
				L	T	P		
1.	Mandatory course at the beginning of the first semester	IP101	Induction Program Two weeks	8 days intensive			40	0
2.	Program Core courses	PC101	Theory	2	1	0	3	3
3.	Program Core courses	PC102	Theory	3	1	0	4	4
4.	Program Core courses	PC103	Theory	1	1	0	2	2
5.	Program Core courses	PC104	Practicals	0	0	4	4	2
6.	Program Core courses	PC105	Practicals	0	0	4	4	2
7.	Program Core courses	PC106	Practicals	0	0	4	4	2
8.	Internship – I	SI101	Internship – I(2 weeks) after I Semester	0	0	2	2	1
9.	Major Project:	PR101	Major Project: Design and Establishment	0	0	8	8	4
10	Audit	AU102	Environmental Science	2	0	0	I	0
11	Audit	AU102	Essence of Indian Knowledge and Tradition	2	0	0	I	0
	Total Credits							20

10. First Semester Detailed Curriculum Contents
10.1. Induction program Common to all PG Certificate programs (AICTE curriculum)

Course Code	:	
Course Title	:	Induction Program
Number of Credits	:	3 (L:2,T:1,P:0)
Prerequisites	;	NIL
Course Category	:	BS

Mandatory induction program is planned as part of Certificate Program Programme Curriculum at the start of the first semester. The duration of the induction program will be of two weeks wherein students will undergo a wide variety of activities without actually starting with their usual classes.

The Induction Program will help the new students in building holistic education, social character, leadership qualities, self-confidence, creativity and appreciation for mankind andnature at large

- Total duration of the Induction Program is planned for 12 to 15 working days.
- Sundays can be utilized for screening some Patriotic / Socially Significant Movies.
- Faculty mentors would be required to obtain the feedback cum suggestions of the students of their respective groups about the Induction programme on the last day.

List of activities for induction program

- Physical Activity
- Creative Arts and Culture
- Mentoring & Universal Human Values
- Familiarization with the institution, Dept./Branch
- Literary Activity
- Proficiency Modules
- Lectures & Workshops by Eminent People
- Visits in Local Area/village
- Extra-Curricular Activities in the institution
- Feedback and Report on the Program

PAGE 16

KGMSDC: Karnataka German Technical Training Institute KGTTI, A Government of Karnataka Undertaking,
Behind Kenna Metals, Nagasandra, Manjunatha Nagar, Bengaluru – 560 073,
Also at: Kalaburagi, Belagavi, Mangaluru, Hubballi, Karnataka State.

Time	Activity	Venue
Day-1 Students arrival and registration.		
9.30 am – 10.45 am	Inauguration and welcome function with parents.	Suitable Venue as per number of mentor-men- tee groups
11.00 am – 12.15 pm	Screening of Institute Documentary Movie; video clips of various functions and events	Conference/Seminar Hall
3.30 pm – 5.30 pm	Institute visit	Around the Campus
5.30 pm – 9.30 pm	Rest and Dinner	Respective Hostels

Day -2		
6:00 am	Wake up call	Respective Hostels
6:30 am -7:20 am	Physical activity (mild exercise/yoga)	Sports Ground Health run
7.30 am -9.20 am	Bath, Breakfast etc.	Respective Hostels
9.30 am – 12.30 pm	Presentation cum Interactive Session Planned well in advance with Important Institution Functionaries like Principal, HODs Mentor-mentee groups - Introduction with- in group.	Conference/Seminar Hall

	Warden etc. Explain rules and regulations and academic procedures.	
12.30 pm – 2.30 pm	Lunch	Respective Hostels
2.30 pm – 5.30 pm	Visit to Respective Departments	Respective Departments
5.30 pm – 6.30 pm	Films on – course and facilities	Conference/Seminar Hall
6.30 pm – 9.30 pm	Rest and Dinner	Respective Hostels

Day -3		
6:00 am	Wake up call	Respective Hostels
6:30 am -7:20 am	Physical activity (mild exercise/yoga)	Sports Ground Health run
7.30 am -9.20 am	Bath, Breakfast etc.	Respective Hostels
9.30 am – 12.30 pm	Explain rules and regulations and academic procedures.	Conference/Seminar Hall
12.30 pm – 2.30 pm	Lunch	Respective Hostels
2.30 pm – 5.30 pm	Visit to Respective Departments	Respective Departments

5.30 pm – 6.30 pm	Films on – course and facilities	Conference/Seminar Hall
6.30 pm – 9.30 pm	Rest and Dinner	Respective Hostels

DAY 4 to day 7 (3 visits planned)		
6:00 am	Wake up call	Respective Hostels
6:30 am - 7:20 am	Physical activity (mild exercise/yoga)	Sports Ground Health run Exercise Yoga Marching with drums
7.30 am - 9.20 am	Bath, Breakfast etc.	Respective Hostels
9.30 am – 10.30 am	Universal Human Values Helps students in the right development of their world-view, mindset, perspective and values.	Suitable venue
10.30 am – 11.00 am	Break	
11.00 am – 12.00 pm	Creative Arts / Technical Workshops / Proficiency Modules	
12.30 pm – 2.30 pm	Lunch Break	Respective Hostels

KGMSDC: Karnataka German Technical Training Institute KGTTI, A Government of Karnataka Undertaking,
Behind Kenna Metals, Nagasandra, Manjunatha Nagar, Bengaluru – 560 073,
Also at: Kalaburagi, Belagavi, Mangaluru, Hubballi, Karnataka State.

2.30 pm – 7.00 pm	Local technical visits planned at least 3 visits	places in and around the area, Computer networking installations, in industry, hotel. Offices, Banks
7.00 pm – 9.30	Rest and Dinner	Respective Hostels

DAY 8		
6:00 am	Wake up call	Respective Hostels
6:30 am -7:20 am	Physical activity (mild exercise/yoga)	Sports Ground
7.30 am -9.20 am	Bath, Breakfast etc.	Respective Hostels
9.30 am – 10.30 am	Universal Human Values	Suitable venue
10.30 am – 11.00 am	Break	
11.00 am – 12.00 pm	Talent Show and Valedictory Function preparations	Suitable venue
12.30 pm – 2.30 pm	Lunch Break	Respective Hostels
2.30 pm 5.00 pm	Talent Show and Valedictory Function preparations	Suitable venue (indoor/ outdoor)

6.00 pm – 8.00 pm	Talent Show and Valedictory Function, Parents meeting Principal's Address	Suitable venue (indoor/ outdoor)
8.00 pm – 9.30 pm	Rest and Dinner	Respective Hostels

Coordinators can be assigned for various activities during the induction Programme.

Sl. No.	Name of the activity	Coordinators
1.	Visits to different departments and around the campus	HODs
2.	Physical/Sports activities in the SportsGround (Morning as well as Evening)	In charge of Physical Education /Sports
3.	• Creative Arts / Technical Workshops. • Lecture Sessions or Films on UniversalHuman Values / Cultural / Talent huntActivities / Performances by Classical or folk artists. • Talent Show and Valedictory Function.	In charge of Technical / Culturalactivities
4.	Presentation cum Interactive Session with Eminent Alumni/Eminent Speaker	Training & Placement In charge
5.	Universal Human Values	Suitable Faculty members
6.	Proficiency Module (English)	Faculty of English language
7.	Local Visits	Hostel Wardens / Discipline incharge
8.	Wake up call/Hostel related activities Arrangements at Valedictory Function	Chief Wardens (Boys/Girls)

Schedule of local visits		
Planned Dates	Proposed visit	Planned visit
	Historical placesin and around the area,	

	Museums,	
	Industries	
	Village	

Note:

- The faculty mentors of the respective mentor - mentee groups / sections will accompany the students on local visits.
- The Institute buses, if there, may be made available for the purpose each day or some other arrangements may be made.
- Parents' consent is to be taken before departure.
- Attendance of the students to be taken at the time of departure and return.

10.2.   Cxxxxxxx

Course Code	:	PC101
Course Title	:	Cxxxxxxx
Number of Credits	:	3
Prerequisites	:	0
Course Category	:	Program Core courses

Course Objectives:
- Develop critical thinking and problem-solving skills using
- Learn and apply skills and procedures to
- Learn and apply skills and procedures to troubleshoot and reinstall install
- Learn and apply skills and procedures to trouble shoot and optimize computer hardware and software
- Identify common security threats and install the preventive methods
- Learn Protocols, Standards, and Services, and hardware.
- The course will help the students to apply the concepts and principles of.

Teaching Approach:

- Teachers should give examples from daily routine as well as, latest hardware and software applications on various concepts and principles in each topic so that students are able to understand and grasp these concepts and principles.
- Teaching and Learning experiences with interactive content such as practice labs, interactive activities and videos
- Use of demonstration can make the subject interesting and develop scientific temper in the students. Student activities should be planned on all the topics.
- Activity- Theory - Demonstrate/practice approach may be followed throughout the course
- Hands on experience should be provided to individual candidates for installations, connections, hardware and software configuration. Trouble shooting skills should be imparted

- Continuous assessment and reviews

Course Content:

Unit 1: Working knowledge and functions
Unit 2: Installation, Configure tools.

Unit 3: Apply skills and procedures to install, configure, and troubleshoot.

Unit 4: Develop critical thinking and problem solving skills using both real equipment configuration simulation tool.

Unit 5: Security, Identify common security threats and vulnerabilities
Unit 6: Preventive Maintenance and Troubleshooting,
Unit 7: Protocols, Standards, and Services, Compare concepts

Learning Outcome:

After undergoing this subject, the student will be able to:

- Select the appropriate
- Install components, to build, repair, or upgrade.
- Install the system
- Trouble shoot the systems for various hardware and software issues and solve the problems to minimize downtime
- Compare performance to the optimum level relate physical properties
- Connect Explain how.
- Explain the roles and responsibilities of the xx Professional.

References:

10.3. Cxxx Practical

Course Code	:	PC104
Course Title	:	Cxxx Practical
Number of Credits	:	2
Prerequisites	:	PC101
Course Category	:	Program Core courses

Course Objectives:
- Assemble the, Develop critical thinking and problem-solving skills
- To install, configure, systems.
- Troubleshoot and reinstall install software and configure, To trouble shoot and optimize
- Install the preventive methods

- Connecting problems

Teaching Practical Approach:

- Teachers should give examples and demonstrate good practices
- All computer systems should be in good condition and loaded with the required software, application software and programmable languages
- Students should operate on individual basis for acquiring good skills and speed of operation
- Continuous evaluation system should be followed in the practical sessions.
- Time factor should be measured as one of the performance factor for evaluation
- Teaching and Learning experiences with interactive content such as practice labs, interactive activities and videos
- Use of demonstration can make the subject interesting
- Activity- Description- Demonstrate/practice approach may be followed throughout the course
- Hands on experience should be provided to individual candidates for installations, connections and hardware and software configuration. Trouble shooting skills should be imparted
- Continuous assessment and reviews

Course Content

Sl. No.	Practical Exercises
1	Assemble Cxxx Develop critical thinking and problem-solving skills using systems equipment and
2	Install, configure, systems and maintenance of systems
3	Troubleshoot and optimize computer hardware and software
4	Install the for security threats as preventive methods
5	Connecting in a network problems
6	Configure, secure, and troubleshoot
7	Conduct the experiments of

Learning Outcome:

After undergoing this Lab, the student will be able to:
- Using the appropriate to build, repair, or upgrade
- Install systems.
- Install hardware and software.
- Install a to meet requirements.
- Select the appropriate components to match system requirements and to adhere to

environmental disposal methods.
- Perform troubleshooting on
- Configure devices to.
- Explain how to troubleshoot devices.
- Perform management and maintenance of systems.
- Explain how to systems.
- Implement.
- Explain the roles and responsibilities of the xx professional.
- Explain

10.4.   Internship

Course Code	:	SI201
Course Title	:	INTERNSHIP-1
Number of Credits	:	2 (4 weeks duration after II Semester)
Prerequisites	:	nil
Course Category	:	SI

Should be undertaken in an industry preferably related to tool and die making, Skill Centers, Institutes.

Internship Objectives:

- Understand industrial culture
- Understand the processes in the IT / Network application industry/Organization
- Understand the hardware and software
- Understand the installation planning
- Understand the quality of Network application

Internship Content:

Sl. No.	Areas of orientation in the internship
I	Observe work culture and industrial culture of the employees
II	Observe how different manufacturing processes are followed in the industry
III	Observe the operations and capabilities of the xx
IV	Observe how xx planning is done in advance and how the Cxxx is functioning.
V	Observe how the quality and the productivity is managed in the Cxxx industry

Course outcomes:

At the end of the internship, the student will be able to:

CO1	Appreciate work culture and industrial culture
CO2	Practice how different processes are followed in the application industry
CO3	Highlight the capabilities of the xx

CO4	Practice how the planning is done in advance and it is established
CO5	Appreciate how the quality and the productivity is managed in the industry

11. Second Semester Curriculum Structure Format

Sl. No	Category of Course	Code No.	Course Title	Hours per week			Total contact hours/ week	Credits
				L	T	P		
1	Program Core courses	PC201	Theory	2	1	0	3	3
2	Program Core courses	PC202	Theory	2	1	0	3	3
3	Program Core courses	PC203	Theory	2	1	0	3	3
4	Program Core courses	PC204	Practicals	0	0	4	4	2
5	Program Core courses	PC205	Practicals	0	0	4	4	2
6	Program Core courses	PC206	Practicals	0	0	4	4	2
7	Major Project:	PR201	Major Project: Design and Establishment	0	0	10	10	5
8	Seminar II	SE201	Seminar II	0	0	2	2	1
9	Audit	AU20I	Indian Constitution	2	0	0	2	0
	Audit	AU202	Entrepreneurship and Start-ups	3	1	0	4	0
							Total Credits	21

12.Second Semester Detailed Curriculum Contents

12.1.   Seminar-II

Course Code	:	SE201
Course Title	:	SEMINAR- II
Number of Credits	:	1
Prerequisites	:	
Course Category		SEMINAR.

Seminar Objectives:

- To Prepare and present one case study of the industry.
- Study the processes of application.
- Be ready for discussions, question and answers for any given purpose.

Suggested activities during Seminar preparation

Sl. No.	Suggested activities for Seminar
I	Collect all the data, Study the historical information of the subject
II	Collect/prepare the process adopted
III	Collect the details where it is used.
IV	Prepare the costing
V	Observation of all the equipments used Highlighting the operations and security features.
VI	Prepare a presentation for one hour duration. Practice presentation
VII	Final presentation to the panel and evaluation

Seminar outcomes:

CO1	Prepare a presentation with all the data
CO2	Present it to the audience, examination, management, customer
CO3	Get feedback

At the end of the seminar presentation, the student will be able to:

12.2.   Indian Constitution

Course Code	:	AU302
Course Title	:	Indian Constitution
Number of Credits	:	0 (L: 2, T: 0; P: 0)
Prerequisites (Course code)	:	None
Course Category	:	AU

Course Objectives:

- Understand The Indian Constitution
- Understand union government formation
- Understand State government formation
- Understand operations of District Administration, Municipal Corporation, Zilla Panchayat
- Understand the process of elections and election commission

Course Content

Unit 1 the Constitution – Introduction:

- The History of the Making of the Indian Constitution
- Preamble and the Basic Structure, and its interpretation
- Fundamental Rights and Duties and their interpretation
- State Policy Principles

Unit 2 Union Government:

- Structure of the Indian Union
- President – Role and Power
- Prime Minister and Council of Ministers
- Lok Sabha and Rajya Sabha
  -

Unit 3 State Government:

- Governor – Role and Power
- Chief Minister and Council of Ministers
- State

Unit 4 Local Administration:

- District Administration
- Municipal Corporation
- Zilla Panchayat

Unit 5 Election Commission:

- Role and Functioning
- Chief Election Commissioner
- State Election Commission

Suggested Learning Resources:

Sl. No.	Title of Book	Author	Publication
1.	Ethics and Politics of the Indian Constitution	Rajeev Bhargava	Oxford University Press, New Delhi, 2008
2.	The Constitution of India	B.L. Fadia	Sahitya Bhawan; New edition (2017)
3.	Introduction to the Constitution of India	DD Basu	Lexis Nexis; Twenty-Third 2018 edition

Suggested Software/Learning Websites:

b. https://www.constitution.org/cons/india/const.html
c. http://www.legislative.gov.in/constitution-of-india
d. https://www.sci.gov.in/constitution
e. https://www.toppr.com/guides/civics/the-indian-constitution/the-constitution-of- india/

Course outcomes:

At the end of the course, the student will be able to:

- Appreciate the Indian Constitution
- Follow union government formalities
- Follow State government formalities
- Be a part of operations of District Administration, Municipal Corporation, Zilla Panchayat
- Involve in the process of elections

12.3. Entrepreneurship and Start-Ups

Course Code	:	HS 302
Course Title	:	Entrepreneurship and Start-ups
Number of Credits	:	4 (L: 3, T: 1, P: 0)
Prerequisites (Course code)	:	None
Course Category	:	HS

Course Learning Objectives:

- Acquiring Entrepreneurial spirit and resourcefulness.
- Familiarization with various uses of human resource for earning dignified means of living.
- Understanding the concept and process of entrepreneurship I the area of specialization its contribution and role in the growth and development of individual and the nation.
- Acquiring entrepreneurial quality, competency, and motivation in establishing own ordganization
- Learning the process and skills of creation and management of entrepreneurial venture in the area of IT Infrastructure management and in running organization

Course Content:

Unit 1 Introduction to Entrepreneurship and Startups:

- Definitions, Traits of an entrepreneur, Entrepreneurship, Motivation
- Types of Business Structures, Similarities/differences between entrepreneurs and managers.

Unit 2 Business Ideas and their implementation:

- Discovering ideas and visualizing the business
- Activity map
- Business Plan

Unit 3 Idea to Startup:

- Market Analysis – Identifying the target market,
- Competition evaluation and Strategy Development,
- Marketing and accounting,
- Risk analysis.

Unit 4 Management:

- Company's Organization Structure,
- Recruitment and management of talent.
- Financial organization and management

Unit 5 Financing and Protection of Ideas:

- Financing methods available for start-ups in India
- Communication of Ideas to potential investors – Investor Pitch
- Patenting and Licenses

Unit 6 Exit strategies for entrepreneurs:

- Bankruptcy, and succession and harvesting strategy

Suggested Learning Resources:

Sl. No.	Title of Book	Author	Publication
1.	The Startup Owner's Manual: The Step-by-Step Guide for Building a Great Company	Steve Blank and Bob Dorf	K & S Ranch ISBN – 978-0984999392
2.	The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses	Eric Ries	Penguin UK ISBN – 978-0670921607
3.	Demand: Creating What People Love Before They Know They Want It	Adrian J. Slywotzky with Karl Weber	Headline Book Publishing ISBN – 978-0755388974
4.	The Innovator's Dilemma: The Revolutionary Book That Will Change the Way You Do Business	Clayton M. Christensen	Harvard business ISBN: 978-142219602

Suggested Software/Learning Websites:

a. https://www.fundable.com/learn/resources/guides/startup
b. https://corporatefinanceinstitute.com/resources/knowledge/finance/corporatestructure/
c. https://www.finder.com/small-business-finance-tips
d. https://www.profitbooks.net/funding-options-to-raise-startup-capital-for-your-business/

Learning Outcome:

Upon completion of the course, the student will be able to demonstrate knowledge of the following topics:

- Understanding the dynamic role of entrepreneurship and small businesses
- Organizing and Managing a Small Business
- Financial Planning and Control
- Forms of Ownership for Small Business
- Strategic Marketing Planning
- New Product or Service Development
- Business Plan Creation