



Skill & Apprenticeship Embedded
Degree & Elective Courses
in
Telangana Higher Education

Telangana State Council for Higher Education

&

Centre for Research in Schemes and Policies

SECTOR SKILL COUNCILS AND SKILL-EMBEDDED COURSES FOR TELANGANA HIGHER EDUCATION

I. Retailers Association Skill Council of India (RASCI)

RASCI is a not-for-profit, independent public limited organization established under Section 25 of the Companies Act. It has been funded by the Government of India along with Equity participation from Retailer's Association of India, Reliance Retail Ltd., Future Retail India Ltd., Shoppers Stop Ltd., Globus Stores (P) Ltd., Trent Ltd., Infiniti Retail Ltd. and Connaught Plaza Restaurant (P) Ltd. to function as the Apex Skill Development Council for the Retail Industry.

RASCI is a collaborative and comprehensive source of expertise and independent advice for industry, training organizations, educational institutions, certifying bodies, employees, students or jobseekers about skill development in the retail industry.

Mandate:

- Development of a culture which promotes and enhances the skills of its workforce
- Ensure availability of entire value chain requirement of appropriately trained manpower in quantity and quality across all levels on a sustained and evolving basis
- Vertical and Horizontal portability for VET skills as a comparable education system
- Building a robust quality assurance across geographies
- Create a transparent source for all industry members for availability of appropriately trained & skilled manpower
- Knowledge/technology & process information as an open system.

Courses on Offer for Students

Type 1: Apprenticeship Embedded Degree Programme (AEDP) – BBA in Retail Operations

Type 2: Short-Term Retail Courses Embedded with Apprenticeship

DETAILS OF COURSES**Table 1 – Degree Course**

District	Apprenticeships	Total no. of Colleges Offering Degree Courses	Remarks	Requirements from Colleges for Conducting Courses
Hyderabad	1200	25	3-year BBA (Retail). All Apprenticeships projected are within the district.	1. 300 sq ft classroom space 2. Rs. 5,000 per student per year to SSC 3. No cost for training of teachers
Warangal	50	1		
Karimnagar	100	2		
Nizamabad	50	1		
Nalgonda	50	1		
TOTAL	1900	30		

Table 2 - Electives

District	OJT (On-the-Job Training)	No. of Colleges Offering Electives	Remarks	Requirements from Colleges for Conducting Courses
Hyderabad	2700	54	All On-The-Job trainings projected are within the district. All OJTs are for a duration of approximately 45 -60 days. The Elective courses are in areas to be chosen from Modern Retail Stores Operations, E-Commerce, FMCG, Direct Sales & Entrepreneurship. Electives are of 12 to 15 credits with additional credits for OJT.	1. 300 sq ft classroom space 2. Rs. 1 lakh investment on some facilities in college 3. Rs. 1,300 per student per year 4. After final year or during final year, 6-month apprenticeship can be provided to the students who opt for these electives.
Karimnagar	250	5		
Secunderabad	300	6		
Warangal	300	6		
Nalgonda	300	6		
Nizamabad	250	5		
Ranga Reddy	300	6		
Siddipet	150	3		
Medchal	150	3		
Mahbubnagar	150	3		
Khammam	75	1		
Adilabad	75	1		

TOTAL	5000	106		
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II. Logistics Sector Skill Council (LSC)

Logistics Sector Skill Council (LSC) is a non-profit, Section 8 Company set up by Ministry of Skill Development & Entrepreneurship, National Skill Development Corporation and Confederation of Indian Industries with the aim to ensure skilled and trained human resource at entry level and up-skilling of the logistics workforce. LSC works with stakeholders, including industry players, government agencies, training providers, and academic institutions, to identify the skill gaps in logistics sector and design training programs to address those gaps. LSC is an approved awarding body of NCVET.

Global Logistics Industry includes all activities of the supply chain, such as transportation, customer service, inventory management, the flow of information, and order processing. Other activities of the supply chain are warehousing, material handling, purchasing, packaging, information dissemination, and maintenance, etc. The logistics market was valued at US\$ 8185.46 billion in 2015 and is expected to reach US\$15522.02 billion by 2023, growing at a CAGR of 7.5% from 2015 to 2024. The market in terms of volume, valued at 54.69 billion tons in 2015 is expected to reach 92.10 billion tons by 2024, growing at a CAGR of 6% from 2016 to 2024. There is a huge employment potential for skilled students at every part of the value chain.

Courses on Offer

Table 1 – Degree Courses

District	Apprenticeships	No. of colleges	Remarks	Requirements from Colleges for Conducting Courses
Hyderabad	200	4	550 nos. are the apprenticeship potential within and around Hyderabad, distributed among nearby districts. They carry stipend. If students are willing to move outside Telangana, then another 300 apprenticeships are possible to accommodate another 6 colleges for degree courses of BBA (Logistics), BMS (Agri Supply Chain Mgt) & BBA (E-Commerce). . Apprenticeship will be operational in the 5 th and 6 th semester of the degree course.	<ol style="list-style-type: none"> Two classrooms with size as per university norms No cost for teachers' training. Will be done by SSC. SSC Fee of Rs. 5,000 per year per student for Govt colleges SSC Fee of Rs. 10,000 per student per year for private colleges Apprenticeship fee of Rs. 4,000 for both spells of 6 months each
Warangal	50	1		
Medchal	50	1		
Nizamabad	50	1		
Nalgonda	50	1		
Ranga Reddy	50	1		
Secunderabad	100	2		
TOTAL	550	11		

				6. In case college needs a training partner that cost can be worked out separately.
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Table 2 - Electives

District	OJT (On-the-Job Training)	No. of Colleges	Remarks	Requirements from Colleges for Conducting Courses
Hyderabad	200	4	All OJTs are for the entire state of Telangana mostly centered around Hyderabad and district. They are for a duration of 45 to 60 days and may or may not carry stipend depending on the Company. Courses can be selected from Warehousing (Storage & Packaging), Land Transportation, EXIM Logistics (Freight Forwarding & Customs), E-Commerce, Liquid Logistics, Port Terminals (ICDs and CFS), Air Cargo Operations, Cold Chain Logistics, Road Transportation. In all 75 courses are on offer.	1. Classroom space by college 2. Other costs vary from elective to elective and can be discussed with college
Karimnagar	50	1		
Secunderabad	100	2		
Warangal	50	1		
Nalgonda	25	-		
Nizamabad	25	-		
Ranga Reddy	50	1		
Medchal	50	1		
Mahbubnagar	50	1		
TOTAL	600	11		

* There are in all seven 3-year degree courses and a huge list of 75 shorter duration courses which can be chosen from as elective courses during the second and third year of ongoing degree courses by students. They can be curated as 30-credit electives with on-the-job training added for practical exposure.

** The 3-year degree courses are of 120 credits. The final two semesters are meant for industry apprenticeship where the student earns a monthly stipend. This earning easily enables the student to offset any increase in fees due to the payments to SSC for assessment, certification, apprenticeship tie-up etc. and still retain a good sum.

III. Healthcare Sector Skill Council

The Healthcare Sector Skill Council (HSSC), a not-for-profit society, has been promoted by the Confederation of Indian Industry (CII), National Skills Development Corporation (NSDC) and Healthcare Industry Leaders representing both public and private sector. The Council is mandated to create a robust and vibrant eco-system for quality vocational education and skill development in Allied Healthcare space in the country. In addition, the Healthcare Sector Skill Council aims to serve as a single source of information on healthcare sector with specific reference to Skill and Human Resource Development in India.

The flagship degree offering of the Council is the BBA (Healthcare Management) course, which is attractive for offer in a general degree college. As per University policy it can be a 3-year or a 4-year degree course, embedding Apprenticeship-based training. In Year 1 of the course, the student is trained as a Hospital Front desk Co-ordinator along with general education. In year 2 the student is trained as a Patient Relations Associate along with general education. In Year 3, the student is trained as a Deputy Duty Manager with 6 months of fixed apprenticeship along with general education component. If the student continues into Year 4, he is trained as Duty Manager with 9 months of fixed Apprenticeship along with general education component. Competence based assessments are carried out each semester.

Course Details - Table 1 – Degree Courses

District	Apprenticeships	Total no. of colleges	Remarks	Requirements from Colleges for Conducting Courses
Hyderabad	300	6	Apprenticeships can be tied up for the BBA (Healthcare Management Course). Students in Nalgonda, Medchal and Khammam may need to move to Hyderabad for the apprenticeship period.	1. 200 sq ft classroom space and 600 sq ft lab space. 2. Capital cost of Rs. 2 lakhs on lab equipment etc 3. Trainers’ fee of Rs. 10,000 which includes training, assessment & certification of trainee teacher as per Skill India standards. 4. Assessment fee of Rs. 1,500 per student per semester
Karimnagar	50	1		
Secunderabad	100	2		
Warangal	50	1		
Nalgonda	50	1		
Nizamabad	50	1		
Ranga Reddy	50	1		
Medchal	50	1		
Mahbubnagar	50	1		

Khammam	50	1		5. Apprenticeships may or may not be possible in hospitals located in interior districts since smaller hospitals cannot pay stipend. Internships will be tied up.
Total	800	16		

Table 2 - Electives

District	On-The-Job training (OJT).	Total no. of colleges	Remarks	Requirements from Colleges for Conducting Courses
Hyderabad	200	4	Students in Nalgonda, Medchal and Khammam may need to move to Hyderabad for the OJT period of 45 to 60 days. Courses are in the Job Roles of Deputy Duty Manager (Patient Relation Services), Hospital Front Desk Co-ordinator, Telehealth Service Coordinator, Panchkarma Technician, Kshara Karma Technician, Coordinator, Phlebotomist. Stipend may or may not be paid depending on the hospital.	1. 200 sq ft classroom space and 600 sq ft lab space 2. Capital cost of Rs. 2-3 lakh on labs depending on course 3. Trainers' fee of Rs. 10,000 which includes training, assessment & certification of trainee teacher as per Skill India norms. Can be revisited. 4. Assessment & certification fee of Rs. 1,500 per student per semester.
Karimnagar	50	1		
Secunderabad	100	2		
Warangal	50	1		
Ranga Reddy	50	1		
Medchal	50	1		
Mahbubnagar	50	1		
Total	550	11		

* The BBA degree course carries 120 credits for 3 years and 160 credits for a 4-year programme. The elective courses can be structured as per the course selected by colleges into 30 credit courses also carrying on-the-job training.

IV Life Sciences Sector Skill Council (LSSSC)

LSSSDC is a not for profit, non-statutory certification body under mandate of Ministry of Skill Development and Entrepreneurship and is registered under the Societies Act, 1860. It has been set up by National Skill Development Corporation (NSDC) and promoted by Confederation of Indian Industry (CII), in partnership with various stakeholder organizations representing both Industry and Govt. Stakeholders.

LSSSDC is recognized and approved, as a Sector Skill Council for Life Sciences Sector for Pharmaceutical sector (including AYUSH), Biopharmaceutical, and Contract Research, by National Skill Development Corporation.

Objectives

- Carry out a Functional & Occupational Mapping and develop a Catalogue of Industry Occupations / Qualifications (Job Roles) in Life Sciences sector
- Develop & Set National Occupational Standards for Qualifications (Job Roles) in the sector
- Develop & put in place an Assessment & Certification mechanism for Trainees and Trainers
- Accreditation & Affiliation of Academia / Industry / Training Partners / Training Centres
- Set up Centres of Excellence
- Put in Place an Effective Labour Market Intelligence System
- Support Industries in Apprenticeship Scheme

Hyderabad and Mahbubnagar districts have a rich presence of the pharma sector which makes them ideal destinations for implementing skill-embedded courses both degrees and electives so that students and industry get benefitted. The implementation of Life Sciences courses in Telangana will pave the way for the State to emerge as a knowledge capital.

Course Details

Table 1 - Degree Courses

District	Apprenticeship Possibility nos.	No. of Colleges	Remarks	Requirements from Colleges for running courses
			3-year courses are - BSc (Production), BSc (Pharma Sales), BSc (Quality Control), BSc (Warehouse Mgt). Average class size is 50 but no. of colleges being restricted owing to this being a pilot initiative that requires to be tested.	1. 500 sq ft classroom & 500 sq ft lab space for Production and other technical courses 2. For BSc (Production) course an investment of Rs. 20 lakhs required on lab equipment 3. Running expenses can be discussed 4. Trainers' fee of Rs. 10,000 per teacher trained 5. SSC Assessment fee of Rs. 1,500 per candidate per semester.
Hyderabad	690	4		
Medchal	607	4		
Nalgonda	100	1		
Nizamabad	10	-		
Mahbubnagar	352	4		
Ranga Reddy	392	2		
TOTAL	2151	15		
Districts	Electives		Remarks	Requirements from Colleges for Running courses
Above Districts	Analyst Chemist-Quality Control Associate-Clinical Research Mgt Pharma Associate-Regulatory Affairs and IPR Bioinformatics Analyst Associate Bioinformatics Scientist Chemist-Retail Pharmacy &		Shorter duration courses which can be fit into the 30-credit framework. Apprenticeship is possible for the students who have taken elective in final year or those who have completed degree.	1. 500 sq ft classroom & 500 sq ft lab space for Production and other technical courses 2. Running expenses can be discussed 3. Trainers' fee of Rs. 10,000 per teacher trained 4. SSC Assessment fee of Rs. 1,500 per candidate per semester. 5. It will also be better for college if one elective is offered in same college where lab has been set up for degree course.

	Store 5 colleges to be chosen.		
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V Media & Entertainment Skill Council (MESC)

Founded in 2012, Media & Entertainment Skills Council is a Not-for-Profit Organization, registered under the Societies Registration Act, 1860. The Council has been promoted by Federation of Indian Chambers of Commerce & Industry (FICCI) with financial support by National Skill Development Corporation (NSDC). The key objective of MESC is to create a robust and vibrant eco-system for quality vocational education and skill development in Media & Entertainment space in the country.

In addition, the Media & Entertainment Sector Skill Council aims to serve as a single source of information on M & E sector with specific reference to Skill and Human Resource Development in India. The Council is also implementing Standards, Training, and Accreditation & Reward scheme of Government of India. Telangana has a very high presence of the media and entertainment sector and has emerged as the film production power house to match Bollywood. The scale and variety of the entertainment industry is undergoing rapid change as also the technologies connected with production, advertising and the very business of media. Students of Telangana can directly benefit from a plethora of courses designed based on emerging job roles and skill gaps in the industry.

Course Details

Table 1 - Degree Courses

District	Apprenticeship Possibility nos.	No. of Colleges	Remarks	Requirements from Colleges for running courses
Hyderabad	200	4	Suitable Degree courses are: 1. BSc in Digital Marketing, Graphics & Advertising 2. BSc in Mobile Film making 3. BSc in Gaming 4. BBA in Media Business Mgt 5. BSc in Film Making	1. One-time investment of Rs. 75 lakhs to Rs. 1 crore on all technical courses except Digital Marketing. 2. Students have high paid job prospects on completion and self-employment opportunity. 3. Assessment fee of Rs. 1,500 per student to
Secunderabad	100	2		
Medchal	50	1		
Ranga Reddy	50	1		

			6. BSc in Audio Production 7. BA in Media Creation 8. BA in Performing Arts 9. BSc in Animation	SSC per semester.
Total	400	8		

Table 2 - Electives

District	OJT/On-the-job training Possibility nos.	No. of Colleges	Remarks	Requirements from Colleges for running courses
Hyderabad	100	2	Courses in AR/VR Developer, Cinematic Tourism, Studio Manager, Digital Marketing Manager, Costume Design, Multiplex Operation Manager, Prosthetic Artist, Event Manager, Correspondent, Anchor, Social Media Manager	1. One-time investment of Rs. 35 - 75 lakhs on all technical courses depending on course 2. Students have high paid job prospects on completion and self-employment opportunity. 3. Assessment fee of Rs. 1,500 per student to SSC per semester. 4. Assessment in some courses with certification by FTII also apart from MESC.
Secunderabad	100	2		
Total	200	4		

* All degree courses are of 3-year duration and 120 credits. Apprenticeships are built into the curriculum. The short duration elective courses can be formulated into 30 credit programmes, selected, or curated from the list of job role-based offerings with the Council. The Council would discuss at length the relevance, content, and advantages of each course with the colleges so that informed choices are made. These courses are both employment and self-employment oriented with potential for very high earnings for competent students. The entire sector is meant for

talented and creative students whose abilities will be harnessed as per their aptitude. MESC would also conduct an aptitude test, MECAT so as to assess the aptitude and ability of the students before course selection.

VI Skill Council for Green Jobs (SCGJ)

Skill Council for Green Jobs is one of the most recently launched initiatives of the Government of India aligned to the National Skill Development Mission. It is promoted by the Ministry of New and Renewable Energy (MNRE) and Confederation of Indian Industry (CII). The creation of the SCGJ was approved on 28th September 2015. Established as a not-for-profit, autonomous, industry-led society, the SCGJ was incorporated under the Societies Registration Act XXI, 1860 on 1st October, 2015.

Green jobs are clean jobs that contribute to preserve or restore the environment, be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency. The Council is futuristic in its activities like Green Hydrogen but areas like solar energy are current and constitute a fast-growing segment of industry & life. The concept of Use-Recycle-Reuse forms the core of the Council's activities and is now a growing discipline internationally.

Environmental jobs are aimed at protecting and promoting environment and minimize the impact of various entities on the health of the Earth. Green jobs make a huge contribution in sectors like energy, agriculture, design, tourism, and transport. Fortune 500 companies now have a ranking parameter in the form of responsibility towards society where the basic production processes of a company are expected to be environment-friendly and geared for reusing of waste.

Course Details

Table 1 – Degree Courses

District	Apprenticeship Possibility nos.	No. of Colleges	Remarks	Requirements from Colleges for running courses
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Hyderabad	200	4	BSc (Renewable Energy), BSc (Solar Energy) Students should be ready to go for apprenticeships outside the State to Gujarat and other states.	Classroom of 300 sq ft for each course. Lab space of 600 sq ft for each course One-time Cost of Lab Equipment between Rs.8-10 lakhs Assessment and certification fee to SSC as per common norms.
Secunderabad	100	2		
Nalgonda	50	1		
Warangal	50	1		
Total	400	8		

Table 2 – Electives

District	OJT/ On-the-job Training Possibility nos.	No. of Colleges	Remarks	Requirements from Colleges for running courses
Hyderabad & Secunderabad	200	4	Electives in Solar Energy, Circular Economy, Solar PV Business Development Executive, Solar Photovoltaic Entrepreneur, Solar PV Maintenance & Installer etc. Students should be ready to go for OJT outside the State to Gujarat and other states.	Classroom of 300 sq ft for each course. Lab space of 600 sq ft for each course One-time Cost of Lab Equipment between Rs.8-10 lakhs Assessment and certification fee to SSC as per common norms. Trainers' fees as per norms. Other details can be discussed.

- India's commitment to achieving a 500-gigawatt clean energy target by 2030 has led to an 81% annual increase in demand for green jobs in January 2023, with metropolitan cities leading the movement

- These skills are required in areas such as renewable energy, climate change readiness, wastewater treatment, climate-resilient cities, green construction, solid waste management etc.
- The growing use of solar power throughout a fast-growing Telangana in its industry, gated communities, and office establishments places a rising demand for skilled manpower to handle such increased applications. Students can immensely benefit from an all-India market for their skills on successful completion of such courses.
- The programmes are structured as per the credit system approved by UGC in terms of both degrees as well as electives.
- The capital cost required is not significant and is one-time.

VII Electronics

The Electronics Sector Skills Council of India (ESSCI) is a Not - for - Profit Organization registered under the Indian Companies Act 1956. The Council has been promoted by Six Associations, i.e., CEAMA, ELCINA, IESA (formerly ISA), IPCA & MAIT, ELCOMA, supported by National Skill Development Corporation (NSDC), ESSCI has been recognized by NCVET as an awarding body for Electronics System Design & Manufacturing sector.

ESSCI focuses on establishing an effective and efficient ecosystem for developing and imparting outcome-oriented skills for Electronics Systems, Design and Manufacturing Industry (ESDM). ESSCI's mandate comprises a plethora of deliverables, including development of curriculum, courses, information database, and delivery system. ESSCI is responsible for standardization, accreditation, and certification processes to enhance the employability of the Indian workforce globally. ESSCI brings together all the stakeholders –industry, labour & academia to develop a future-ready skilled workforce for the ESDM Sector with the following objectives:

- Aligning itself to the vision of creating “Aatmanirbhar Bharat” and supporting key flagship programmes like Make in India, Digital India, Electronics India, Start-up India & Skill India
- Conduct skill gap studies for quantitative & qualitative demand of workforce in the ESDM Sector
- Create Occupational Standards & Qualifications in Electronics Job roles

- Affiliation, accreditation, assessment, and certification for electronics-specific job roles
- E-Innovation & Training: Enabling the creation of Innovation/R&D Infrastructure in emerging areas of ESDM.
- Building Centre of Excellence & Model Training Centres.
- Adoption of best global practices for imparting skills and Certifications
- Adoption of the latest state of the art technologies for online training delivery, Assessment & Certification, AR/VR Training Modules, Virtual Labs etc.
- Development of foundation courses for schools & colleges. Preparing future-ready qualifications in IoT, Drones, Smart Technologies, EV, Solar and Green Energy, Automation, AI/ML, Smart Manufacturing-Industry 4.0 etc.

Course Details

Table 1 – Degree Courses

District	Apprenticeship Possibility nos.	No. of Colleges	Remarks	Requirements from Colleges for running courses
Hyderabad	100	2	Degree courses – BSc in Mechatronics, IOT, Electronic Hardware Design, Electronic Manufacturing, Digital Electrician, IT Infrastructure Management Service, Industrial Refrigeration & Air Conditioning.	Classroom space of 400 sq ft and laboratory space of 1000 sq ft. One time investment by college of about Rs. 35-45 lakhs in equipment. Assessment fee of Rs. 1,200 per candidate per semester Training of Teachers will be done by SSC at common norms cost. Desirable for college to have Engineering background teachers who can be trained.
Secunderabad	100	2		
Total	200	4		

Table 2 - Electives

District	OJT/ On-the-job Training	No. of Colleges	Remarks	Requirements from Colleges for running courses
Hyderabad	100	2	Electives in VLSI Design Engineer, Quality Engineer, IOT Hardware Analyst, Embedded Full Stack IOT Analyst, Embedded Software	<i>Electronics is a core engineering, premium discipline. Hands on skilling is part of the education process and students will have to be hands-on before they go for internship or</i>
Sec'bad	100	2		
Total	200	4		

		<p>Engineer, Quality Engineer, Robotics Automation Lead, Service Engineer (IT Hardware), Mechatronics Maintenance Specialist, Motor and Controller Design Engineer, Sales Engineer (Electronics Product), Field Engineer (RACW), (Electronics Hardware Design Engineer, Battery System Design Engineer.</p> <p>All Electives can also be offered as Diploma Courses.</p>	<p><i>apprenticeship or any form of on-the-job training. Hence a lab is a necessity for taking up courses in rigorous subjects like Mechatronics, IOT, Electronic Hardware Design, Electronic Manufacturing, IT Infrastructure Management or any of the elective or diploma courses. Setting up of a laboratory requires investment from the college/Government taking up such courses.</i></p> <p><i>Hence the capital cost and the running costs can be worked out after discussion with the colleges choosing the subjects.</i></p>
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VIII Tourism & Hospitality Sector Skill Council (THSC)

A Not-for-Profit Organization, registered under the Societies Registration Act, 1860, promoted by the Confederation of Indian Industry (CII) with inclusive representation of the Government, Industry, Industry Associations and Training Institutes across India. It is formed by the industry and for the industry to tackle the skilling of large manpower to fulfil the industry requirements, playing a crucial role in bridging this ever-growing gap. THSC is now an approved awarding body under National Council for Vocational Education and Training (NCVET). It has the mandate to create a robust and sustainable eco-system for skill development in the industry, catering to all the sub sectors of the industry, namely, Hotels, Tour Operators, Food Service Restaurants, Facilities Management and Cruise Liners.

The Council has the vision to create a robust industry aligned ecosystem by promoting skill development in Hospitality and Tourism sector, to benefit millions in India to get respectable employment opportunities for serving customers and other stakeholders.

It is on a mission to contribute to the development of industry competent workforce through the establishment of National Occupational Standards, Labour Market Information System, Affiliation of training partners / vocational institutions, Certification of Trainers, and facilitation of learner assessments and certification.

Flagship Undergraduate Program in Tourism and Hospitality of THSC

THSC will collaborate with selected Universities for introducing 6-semester Undergraduate Programmes in Tourism and Hospitality based on skill components as per NSQF. The course is embedded with One-year internship/apprenticeship and students in the final semester will be also offered a career readiness program

The course can be offered through 3 types of specialization

- BSc Catering Technology & Culinary Arts
- BBA Hospitality Management- Food & Beverage Service Operations
- BBA Hospitality Management - Facility Operations
- BBA Hospitality Management - Accommodation operations
- BBA Hospitality Management- Restaurant Operations, BBA Hospitality Management- Tour & Travel Operations

An Overview of Undergraduate Degree in Tourism and Hospitality

- Six semesters of Undergraduate Degree program (BA/BSc/BBA) in Tourism and Hospitality based on job roles approved by NCVET (60% Skill Component).
- Specialized programs
- One-year industry internship/apprenticeship under NAPS
- THSC will undertake an assessment every semester for the Skill component and provide Govt recognized NCVET certificates.
- Entry Requirement- 10+2(Any Stream).
- Degree to be awarded by the University

THSC Services

- The curriculum is aligned as per NSQF with a minimum one-year internship/apprenticeship cum career readiness program from levels 4-5.
- THSC will design curriculum as per industry needs (60% Skilling and 30% GeneralComponent)
- Assistance in setting up the laboratory in terms of equipment details, specifications and layout
- THSC will facilitate getting loan assistance from NSDC for setting up Labinfrastructure
- Faculty Orientation Program and Faculty Development Program
- Academic Support including Handbooks, e-learning, and seminars by industry experts

- Support for Internship, Apprenticeship and Placement
- Assessment services will be provided by THSC for the skill component and the general component will be assessed by the University
- THSC will provide Skill India-authorized certificates and University can issue the degree or be a joint signatory to the degree as per University choice
- Program fees can be decided by the University and THSC has no role to play in it.
- THSC will provide Career Readiness Program which will include:
 - Soft Skill & Interview Preparation skill
 - Placement/Internship/NAPS facilitation
 - Participation in Career fairs

The Council will carry out an AI enabled assessment through its more than 2500 certified assessors.

Course Details

Table 1 – Degree Courses

District	Apprenticeship nos.	No. of Colleges	Remarks	Requirements from Colleges for running courses
Hyderabad	135	3	3-year Degrees BSc Catering Technology & Culinary Arts BBA Hospitality Management- Food & Beverage Service Operations BBA Hospitality Management - Facility Operations BBA Hospitality Management - Accommodation operations BBA Hospitality Management- Restaurant Operations BBA Hospitality Management- Tour & Travel Operations. These are job role-based courses. Council will place students as apprentices for degree courses.	350 sq ft for classroom and 450 sq ft for lab for certain courses. BSc Catering Technology & Culinary Arts will require Rs. 15 lakh investment in lab equipment. Other degree courses upto Rs. 5 lakh investment. One-time affiliation fee to SSC of Rs. 15,000 per student for private colleges and Nil for Government colleges. Assessment and certification fee of Rs. 1,200 per student per semester as per common norms.
Ranga Reddy	65	1		
Warangal	50	1		
Total	250	4		

Table 2 – Electives

District	OJT	Colleges	Remarks	Requirements from Colleges for running courses
Hyderabad	550	10	Electives Travel Advisor, Counter Sales Executive-Tourism & Hospitality, Pastry Bakery Commis, Tour Guide, Nature Guide, Homestay Host, Barista Executive. These are job role-based courses. Elective students will be sent for OJT but can also be placed as apprentices after their degree. Many electives are entrepreneurial in nature too. Job roles in demand are: Food & Beverage Service Associate, Counter Sales Executive- Tourism & Hospitality, Guest Service Associate (Housekeeping) & Commis Chef.	Minor or no investment required for electives. Rs. 8,500 per month trainer cost and Rs. 1,200 per student as Assessment fee. SSC charge is Rs. 5,000 per student.
Sec'bad	500	9		
Karimnagar	130	2		
Nalgonda	100	2		
Nizamabad	275	4		
Warangal	450	7		
Ranga Reddy	450	7		
Khammam	75	1		
Total	2,530	42		

IX Apparel Made-ups and Furnishing Sector Skill Council (AMHSSC)

The AMH SSC was incorporated on December 24, 2013, as a company under Sec25 of the Companies act 1956 with the objective of developing a skills repository for the Apparel, Made-Ups and Home Furnishings value chain. It further aims to build an organization that can develop standards, evaluation criterion and accreditation systems for providing multiple and varied technical skills in the textile sector including employability skills to both men and women & challenged persons with regular and direct inputs from industry. It creates opportunities for "Training of Trainers" in both the content and pedagogy for imparting skill training for workers engaged in the three chosen segments of the textile sector, apart from quality assurance.

The Council also develops and promotes a standardized, output oriented and quality assured affiliation and accreditation process to demonstrate sustainable business value through it. Its focus is on continuous improvisation of the training delivery value chain, i.e. training process, training content, trainers, curriculum design, industry endorsement for certification etc. Assisting in centers of excellence and innovation by utilizing the standardization in training, evaluation and certification developed by the SSC of the sector is another function. Integration of technology in training, development of a sector skill development plan and maintaining a skill inventory along with promotion of resource support agency (academies of excellence) is a key function.

AMH SSC is a body with a well-defined organizational structure comprising industry members from knitwear, apparel, hosiery,

fashion design, made-ups / home furnishing, association, academia, domestic apparel industry, NSDC besides representative from Ministry of Textiles.

The objective of the assessment and certification under the Council is the certification of competency. The main objectives of assessment, testing and certification are as follows:

- Effective assessment testing and credible certification of formal /informally acquired skills of targeted persons.
- Setting uniformity in the assessment of testing and certification process in the clothing, made-ups & home furnishing sector for enhancing identical delivery of skill sets.
- Certification being recognized by national and international Governments industries and trade organizations.
- Publicize rating and outcome information on assessment of trainees and institutions.

Course Details

Table - Degree Courses

District	Apprenticeship nos.	No. of Colleges	Remarks	Requirements from Colleges for running courses
Hyderabad & Secunderabad	Study tours, Industrial visits are part of course. Course has been designed by industry experts. Due to industry compliances on	2	BSc/BA in Fashion Design & Technology BA in Fashion Design Courses have been designed based on existing skill gap in the industry. Successful students will join Apparel industry as Management Trainees in different departments with promising salaries. Jobs will be in industry cluster in Bengaluru, Tirupur, Surat, Ludhiana, and NCR region.	330 sq ft classroom space 450 sq ft hybrid lab with classroom Cost of equipment – computer terminals and sewing machines along with other furniture etc., will be about Rs. 28 lakhs. (A one-time investment) Working expenses of Rs. 1.5 lakhs per batch of 15 students Training of Teachers cost is Rs. 22,000 per teacher

	quality, apprenticeships and OJT are not in vogue in this industry.			Assessment fee is Rs. 1,200 per candidate per semester.
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X Agriculture Sector Skill Council

Agriculture Skill Council of India (ASCI) is a Section 8, Not for profit concern working under the aegis of Ministry of Skill Development & Entrepreneurship (MSDE). ASCI works towards capacity building by bridging gaps and upgrading skills of farmers, wage workers, self- employed & extension workers engaged in organized / unorganized segments of Agriculture & Allied Sectors.

ASCI is contributing to nation building through skill development in agriculture especially at a time when country is experiencing stagnant agricultural growth, exodus of quality manpower to other sectors, changing climate with increased variability in production parameters and transformations in international agriculture markets that are especially too subsidized, thereby challenging the competitiveness of Indian agriculture.

ASCI has taken upon itself the responsibility of transforming Indian agriculture through developing the skills of country's manpower in emerging areas of agriculture. With the development of 176 Qualification Packs, ASCI has covered most segments. It is now equipped to enter the education system by dovetailing its skill courses to curate full-fledged degree courses or electives/diplomas as per college choice. Its courses cover agriculture and all its allied sectors, thereby forming the core relevant for the agrarian sector of the economy.

Objectives

- Determining skills/competency standards and qualifications and development of National Occupational Standards (NOS).
- Preparation and maintenance of skill inventory to facilitate individual choices.
- Development of sector-specific skill development plans.
- Standardization of affiliation and accreditation process.
- Affiliation, accreditation, assessment and certification of Vocational Institutes/Programmes.
- Plan and execute Training of Trainers (ToT).
- Promotion of academics of excellence.
- Establishment of a well-structured, sector specific, Labour Market Information System(LMIS) to assist planning and delivery of training.
- Adoption of global best practices.

Course Details

Table 1 – All Courses

District	Apprenticeship nos.	No. of Colleges	Remarks	Requirements from Colleges for running courses
Hyderabad & any 2 districts like Warangal & Adilabad	Agriculture sector is in informal sector and apprenticeships are not possible to be tied up. However, the entire learning process is hands-on and will be	5	3-year Degrees & 1-year Diplomas or Electives in Greenhouse Technology, Farm Equipment Operation & Maintenance, Horticulture, Sustainable Agriculture, Industrial Aquaculture & Fisheries, Agriculture, Industrial Fishing Technology, Agriculture & Soil Science, Agri-Business Management, Dairying and Animal Husbandry, Agriculture Technology, Beekeeping, Organic Farming, Medicinal Plants,	Space requirement, costs and lab needs can be worked out with the SSC. Most courses are entrepreneurship oriented but apprenticeship will be attempted.

	carried out in the field, apart from classroom content.		Agri-Entrepreneurship and Rural Enterprises. Colleges can choose either degree or elective form. Long list of courses on offer which can be decided during discussions by colleges.	
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XI Capital Goods Sector Skill Council

About Capital Goods Industry

The Capital Goods Skill Council is a unique initiative to play a proactive role and bridge the gap by creating a vibrant ecosystem for quality training and skill development for the capital goods sector. Capital Goods Skill Council (CGSC) is a Not-for-Profit Organization registered under the Societies Registration Act, of 1860. The Council has been promoted by Federation of Indian Chambers of Commerce and Industry (FICCI) and the Department of Heavy Industries (DHI), Government of India, with financial support by National Skill Development Corporation (NSDC). The supporting organisations include leading industry and industry associations representing both the public and private sector.

Strategic Importance

Capital Goods Sector comprises plant and machinery, equipment / accessories required for manufacture / production, either directly or indirectly, of goods or for rendering services, including those required for replacement, modernization, technological upgradation, and expansion. It also includes packaging machinery and equipment, refrigeration equipment, power generating sets, equipment and instruments for testing, research and development, quality, and pollution control.

Capital Goods sector has multiplier effect and has bearing on the growth of the user industries, as it provides a critical input, i.e., machinery and equipment to the remaining sectors covered under manufacturing activity. The capital goods industry contributes 12% to the total manufacturing activity which translates to about 1.8% of GDP. If the goal of achieving 9% growth in GDP must be realized, then it is important for the manufacturing industry to grow at least by 11-13% per annum. This further requires that the Capital Goods sector, which is the core of manufacturing, should grow at around 17-19%.

Degree and elective courses under the capital goods sector are of high value and capex intensive to start with. But after the one-time investment the courses are of a high-end manufacturing in nature and come close to engineering levels for science students to take up. Further the direct industry-connect of the Council will provide the students a head start in their careers.

Course Details

Table 1 – Degree Course

District	Apprenticeship nos.	No. of Colleges	Remarks	Requirements from Colleges for running courses
Hyderabad & Secunderabad	100	2	BSc (Manufacturing Skills) This is a high-end course and it is advisable to try it in 2 colleges to begin with as there is a significant investment component.	Lab and classroom space of 1000 sq ft each needed. College/University has a one-time investment of about Rs. 1 crore for machinery for the degree course. Efforts can be made by SSC to involve big industry to sponsor a college or set up facility provided, at university level the institution takes up proper ownership of assets and provides security and right usage. This requires discussion.

Table 2 – Electives

District	OJT/ On-the-job Training	No. of Colleges	Remarks	Requirements from Colleges for running courses
Hyderabad & Secunderabad	100	2	Electives (as per 30 credit formula) Industrial Tool Manufacturing, Production Technology, Printing & Packaging Technology, Additive Manufacturing Technology, Polymer Technology, Advanced CNC Machining Technician, CNC Machining 5 Axis, Machinist Tool Room.	College/University has a one-time investment of about Rs. 50-75 lakhs for the electives/diplomas. Some of the hands-on work can be covered under OJT but industry will permit only lab -trained students to touch and operate their machines.

Roles of Different Stakeholders and Further Steps

The exercise of introducing skill-embedded courses into Telangana colleges needs to commence from the academic year 2023-24 for the benefit of employability of students and enabling them to capture the job opportunities across the State and country. In this exercise the roles of different entities are very clear and laid out as follows:

Sector Skill Councils (SSCs)

(i) The chief role of the SSCs is to bring industry standards into skilling, set occupational standards, provide course curriculum & Qualification Packages (QPs) for training, carry out assessment & certification of trainees. The presence of the top companies of that sector in the Governing Body of the SSC provides a direct industry connect which is leveraged and utilized for demand-based skilling, apprenticeship, and employment. They are regulated by MoSDE through the National Skill Development Corporation (NSDC).

(ii) SSCs will provide customization of the curriculum to evolve a basic degree or elective or Diploma to cater to college-specific requirements. Job fairs will be held by the SSCs.

(iii) All SSCs have the capacity for carrying out Training of Trainers (TOTs) or Teachers' Training which would be the first exercise in UP after course choice and before launching the courses. The SSCs would assign their training partners to a college only in case no suitable faculty is available for training. The fee chargeable by the SSCs for Trainers' is as per prescribed common norms and is usually added to the annual fees of the student or met by the institution. SSCs would also develop specific courses as required by the college or State University and obtain approval from NCVET.

Colleges/Universities

(i) The chosen colleges would have the responsibility of providing classroom space for the new courses as well as Wi-Fi connectivity. Certain sectors would require a laboratory facility for which the college may have to carry out some site preparation & purchase equipment so that the SSC function. This will be a cost to the college/University undertaking certain courses like Electronics, Capital Goods, Apparel etc. They would also need to identify some of their own faculty for a Teachers' Training exercise. During the annual admission process, college principals would need to impart adequate publicity to the new skill-embedded courses on offer, highlighting their job relevance, apprenticeship & employment potential and prevent any awareness gap. SSCs will participate on their own whenever required by the State Government in awareness generation activities, so that students across the State are well informed about the prospects of various skill-embedded courses. This can be carried out during the pre-admission period leading to counselling and course choice.

(ii) College Principals would need to adopt a progressive and dynamic approach to the education system in their respective colleges and also motivate suitable faculty in their colleges to re-orient their minds & teaching methods to such skill-embedded courses which are very different from usual pedagogy. Principals must also be open to hiring contract faculty or trainers for the courses they may opt for in this sphere.

(iii) State Universities may provide the authorization to the affiliated colleges for offering skill-embedded courses. These courses are in line with UGC guidelines. Such an authorization by the Universities to their colleges may be omnibus/generic and the colleges may not be required to seek approval of the University for every new course in future.

(iv) State Universities may dedicate some space and manpower for setting up Centers of Excellence/ Common Facilities in selected sectors and prepare themselves for functioning as a Hub and Spoke model for higher end skills in favour of their affiliated colleges. Several SSCs/industry partners are eager in this regard and quick, facilitating decision making may result in several such Centers across the education landscape of UP. This is a sustainable direction in which multi-sectoral, permanent industry-connect can be secured with minimal cost to the Government.

State Government of Telangana

(i) The State Higher Education Department / Higher Education Council may accord approval to all State Universities to undertake skill-embedded degree/post graduate courses by themselves and their affiliated colleges. Autonomous Colleges would be free from such an approval. This may be essential in certain States where a State University may require Government approval to authorize its affiliated colleges to undertake new skill-embedded courses.

(ii) The State Government has a very instrumental role to play in inviting high-CSR IT, Engineering and Service Sector Companies to adopt certain State Universities and Women's Colleges. Microsoft, Google, TCS etc. have focused interventions in certain educational institutions but their free courses and software are of a short duration and foundational in nature. CRISP opines that most Companies would participate in longer term curriculum provision and mentoring, provided the institutions come up with clear cut proposals and have an interactive engagement. There are examples in other States where colleges have tied up with IT companies for a 3-year IT course where the Company provides the entire content and guaranteed placement. Such an effort can be initiated in Telangana for about 10 colleges. CRISP would provide a shortlist of Companies as well as possible modes of participation. Companies respond mainly to Government initiative.

(iii) The entire process of college-course mapping, earmarking classroom and lab facility, identification of teachers for training/hiring trainers, finalizing course content with the SSCs, MoUs with the SSCs, awareness generation before admission process must be completed before formal admissions start. To meet such timelines, it is essential that the State Government/Universities give the go ahead to the identified colleges immediately so that college -course mapping can be concluded by end of May 2023.
