

# Detailed Project Report

## Centurion Skills University Andhra Pradesh

To be Established Under Section 8 of the Companies Act 2013

by



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**UNIVERSITY**  
*Shaping Lives...*  
*Empowering Communities...*

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**April 2016**

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## Executive Summary

The current education system creates millions of “think-ready” youth but a paucity of youth with job-ready and entrepreneurial skills. For sustainable development, it is essential that the universities must be in the forefront of developing human resources that have the competence to face and steer through the complex environment in which we live. Hence, our education and training needs a paradigm shift. Education cannot be one time affair, skill and knowledge cannot be put in isolated compartments and development cannot be exclusive. Addressing existing and future problems of the society must be integral to the Universities’ curriculum. Education needs to be continuous and lifelong, knowledge and skill needs to be integrated at all levels, and development needs to be inclusive in practice.

Proposed Centurion Skills University (CSU) in Andhra Pradesh has been planned to meet the socio-economic, technological and ecological needs and aspirations of the local and larger community in general and that of the youth in particular. The University will be in the forefront of context specific skill development and knowledge generation. The University will function in the mode of different multidisciplinary Schools, each having a number of specialized disciplines. The Schools will offer skill development programs as per National Skill Qualification Framework (NSQF), Diploma, Degree and Post-graduate programs. In case of gap in pre-required education for a particular skill development program, curriculum of National Institute of Open Schooling (NIOS) will be used to bring the students up to appropriate educational level required for that skill.

To start with, in 2017, School of Agriculture, School of Veterinary Science, School of Manufacturing and School of Data Sciences will be established. Since facility development will take some time, certain activities will be in leased premises and farms.

Other Schools will be set up in phases. These include School of Utility and School of Forestry in 2018; School of Mining and School of Construction in 2019; School of Hospitality and Entertainment and School of Financial Services in 2020; School of Trade and Commerce and School of Education in 2021; School of Health and Wellbeing and School of Development Sciences in 2022; School of Public System and School of Governance in 2023; and School of Tourism in 2024. Any change to the above plan and addition of new Schools based on the needs of the market and society will be undertaken with the approval of the University’s Academic Council.

The student strength of the University will increase from about 600 in 2017 to 14000 (including skill development) in next ten years’ time.

To start with, the estimated establishment/capital expenses will be Rs 15.3 crore to be financed by 40% equity/grant and 60% loan. The Centurion Group has approved loans of Rs 60 crores (equipment loan) from NSDC and Rs 20 crores (building loan) from OBC bank. Financial closure will not be a problem once approval for the University is given.

The annual expenditure is estimated as Rs 4.75 crore, Rs 13.81 crore, Rs 29.96, Rs 41.48, Rs 57.06 crore for first five years respectively. The estimated income that can accrue in years 1 to 5 are respectively Rs 4.6 crore, Rs 13.0 crore, Rs 31.5 crore, Rs 44 crore and Rs 61.5 crore. Thus, there is a gap of Rs 0.15 crore in 1<sup>st</sup> year, Rs 0.81 crore in 2<sup>nd</sup> year and break even in 3<sup>rd</sup> year.

The University will bring in national and global partnership. Existing partners from different industries, such as Automobile, manufacturing, retail and hospitality, renewable energy; and Universities such as Deakin, will play an active role. New partners will be brought in due course.

The method of education and training will be experience based and practice oriented. While effort will be made to solicit financial and in-kind support from the government, industry and civil society to meet the needs of the underprivileged, the University will broadly function on self-financing mode.

The University will be **located in its own lands in Rollavaka village of Gajapati nagar mandal of Vijayanagaram and adjacent government land (a hillock) in Tekkili Gram Panchayat, SN 159, Nelimarla Mandal, Vizianagaram district.** The university will start with 31 acre of own land for class rooms, office blocks, hostel facilities, sports and other amenities. Unique feature of the university will be setting up of Industrial Parks, where industry partners will be invited to set up centres of excellence in the areas in alignment with the proposed schools. It will require 160 acre of additional land in the adjacent hill, primarily to house these industry supported incubation and training centres.

## CHAPETR I: INTRODUCTION

### 1.1 Rationale of the University

Even after seven decades of independence, as a nation, we have failed to integrate economic growth with distributive justice, and unable to break the social barriers of discrimination and prejudices based on ethnicity, caste, gender, religion and language. Unfortunately, the mainstream higher education institutions in the country have not been effective in satisfying the needs of the underprivileged sections of the society. In a market-led globalized era, universities are competing for students, faculty, funding and image to meet the growing needs of those who can pay, in a world that has moved into a knowledge era, with abundant information and enormous choices. While almost everything around us has changed in the last 25 years including the way we live, work, play, entertain, make friends and build relationships; our education systems have largely remained the same – this causes a disconnect between the outcome of our learning systems and expectations from the real world. The rules of learning in a supply and demand constrained era of past cannot be applied today.

The students and faculty have become victims of such a system that could not be corrected by the larger political-economic system. However, within the given constraints, there are opportunities to create an inspiring and effective learning ecosystem that represents the future of education and build a just society. Universities need to identify implementable strategic interventions in higher education that can support “development with dignity” in India.

According to FICCI Higher Education Vision document 2030, “almost half (40% to 85% depending on the sector) the graduates are not employable in any sector, based on the industry standards of employability”. Of the total number of employable graduates, 53% to 81% (depending on the sector) come from top 30% of the colleges in the country.

A large number of people are excluded from entering into the System and excluded within the System. Those excluded from entering into the higher education system have specific characteristics of region, caste, class, gender and religion. For example, there is a wide disparity in the GER between Delhi (47.9%) and Assam (9%). Similarly GER in Urban (30%) and Rural (11.1%) areas are widely different. GER of ST, SC, OBC and Muslims are respectively 7.7%, 11.6%, 14.8% and 9.6%. GER of males and females are respectively 19% and 15.2% (ibid).

Those who are excluded within the system have specific characteristics of language, previous educational background, internal environment of the educational institution, external educational environment, linkages and relationships with the external environment, and demand conditions.

### *Strategies for Providing Inclusive Meaningful Higher Education*

Importance of co-curricular activity is emphasized in the National Curriculum Framework (NCF) of India to partially bridge the gap in providing holistic education. It is undertaken to “strengthen the classroom learning as well as other activities both inside and outside the classroom to develop the personality of the child” (Bhatia, 1996).

Unfortunately co-curricular activities are often resource constrained, do not yield significant immediate tangible benefits to the students, and fails to elicit enthusiasm of students, parents and teachers. These activities get step-motherly treatment in time table and are often maintained for cosmetic significance. There is hardly any shared-realization that activities beyond narrow curriculum have any value to the individual and society.

Following Christensen (2012), it is not unusual that a person having gone through higher education is not sure how

- He/she will be successful and happy in his/her career?
- His/her relationship with spouse, children, and extended family and close friends become an enduring source of happiness?
- He/she can live a life of Integrity – and stay out of jail?

The education is disconnected from the reality. Real life and context specific problems hardly get attention of teaching and research. Students rarely go through the schools of experience.

Our learning system with over dependence on rote learning and tuition, assessment system, poor quality of teachers, weak governance and management system of educational institutions and the absence of scientific temper in the society are handicap for a holistic education.

The learning system will address the following issues.

- How students and teachers can become co-learners?
- How to create the pace, space and context for learning?
- How to move up in the hierarchy of learning by listening, through seeing, doing and to eventually discovering?

The assessment system will address the following issues.

- Can the assessment be a means to learn?
- Can it be more self-assessment?
- Can the assessment be in open book, online and flexi time mode?
- Can we recognize prior learning and develop individualised curriculum, teaching, learning and assessment method for award of degrees?

National Skill Development Corporation has already initiated the process of recognition of prior learning (RPL) for appropriate level of skill certification.

The shortage of good teachers in central and state universities is at the level of 40% and 35% respectively (KPMG, 2014). While there are not enough teachers, their quality is also a matter of Concern. The challenge is ‘how the teacher converts herself as facilitator of learning?’

Governance and Management System of the University needs to be student and faculty centric. Since academic institutions provide an opportunity to students for intensive interaction at the formative stage of their life, any undesired practice followed by these institutions is picked up by them as a way of engaging with the “real world”.

Culture and Value system of the Society will address the following issues

- Can the administrative control of faculty and students be substituted by self-control and social control?
- Can we develop scientific temper?
- Can we create an environment where failure is not despised but accepted as a useful step in the road to success?
- Can we move from explanatory mode to acceptance of responsibility?

#### *Higher Education for All and Lifelong*

The number of higher education institutions and the teaching-learning capacity available within them are too less for a country of India’s size to meet the needs of lifelong education. Higher education and continuing education in our country have become substitutes for unemployment, for many. We need to have a paradigm change. Can the education for an individual be need based? Can there be support system available for the individual in identifying her/his need? Can there be opportunity to align evolving need with the supply of educational opportunities? It requires a change in mind-set of the authorities, institutions, key opinion makers and parents.

Indian society has been in existence since millennia. Still there are large sections of indigenous communities, artisans, farmers, self-employed, etc. who are not formally educated in our higher education system. They have been living with nature without much degradation of their natural ecosystem. Can we consider them uneducated because they do not score well in “our scale” of measurement? Can we develop a scale of measurement for holistic education that is competency and outcome based? Such a scale can help in assessing level of achievement of an individual.

#### *Education for the Holistic Development of the Society*

The spirit of cut-throat competition has made the product of higher education system less humane. Importance is given to the individual benefit at the cost of the society, which eventually brings harm to the self. Most of the public institutions in the country have not kept pace with the needs of the individual and society. In the process, we find a large number of institutions in the country are mismanaged. They fail to satisfy the needs of the



individual and society in a resource constrained environment. Since private education operates in the market system, they meet the needs of those who can pay. Hence, it is not surprising that the large section, who constitute bottom of the economic pyramid, are at the receiving end of the health, education and livelihood opportunities.

Can we think of an education system that encourages cooperation among individuals, creation of cooperative systems, where competition is not to out-form other but continuous self-improvement? Instead of a society of education divide, can we think of the forward movement of people in the education continuum?

The rationale for setting up the University in Andhra Pradesh is to meet the specific knowledge and skill development needs of one of the economically backward regions of India. The location of the institute is strategic, considering the need for skill building opportunities in the underdeveloped regions around it. The university will create new knowledge, develop curriculum and pedagogy, nurture trainers and skilled manpower at different levels for different economic and social enterprises in the country and abroad. We propose to provide inclusive and meaningful higher education through

- Holistic development of a citizen in physical, economic, intellectual, psychological, social and spiritual dimensions
- Encompassing every citizen and throughout life
- Holistic development of the society

## **1.2 Mission and Vision of the Centurion SkillsUniversity**

The proposed University has the mission to develop skilled human resource for an environment-friendly, gender sensitive, equitable and sustainable socio-economic development of the people of Andhra Pradesh in particular and that of India in general. The University intends to become an institute of excellence for meeting the holistic needs of skills development and continuing education in AP and other parts of the country.

## **1.3 Objectives and Strategies**

The objectives of the proposed University are:

- To provide access to high quality education and training in skill development in all the socio-economic sectors
- To facilitate learning and research in the areas of skill development in the context of Andhra Pradesh
- To further the process of national integration, social justice, secularism, a democratic way of life, holistic development and scientific approach to the problems of society
- To make special provisions for intake of students belonging to rural/tribal communities, as well as scheduled castes and slum dwellers.

The proposed Centurion Skills University will be established under Section 8 of the Companies Act 2013. CSREM Trust, Bhubaneswar is the sponsoring body. It will specifically satisfy the felt need and mission of the National Skill Development Corporation (NSDC) and NSDA to provide context oriented skill development through other regional Universities.

The University will be structured to have different Schools with a fair degree of autonomy. Each School will have different Centers of study. The Schools and respective Centers will be functionally autonomous while operating under the broad direction of the University's Mission and Vision. The Schools will network with other institutes both within and outside the country to leverage its impact for the development of context specific knowledge and human resource of the region.

The CSU will have 15 Schools such as School of Development Practice, School of Manufacturing, School of Utility, School of Agriculture, School of Forestry, School of Fisheries and Animal Husbandry, School of Mining, School of Construction, School of ICT, School of Hospitality and Entertainment, School of Financial Services, School of Trade and Commerce, School of Education, School of Health and Wellbeing, and School of Public System.

The University will carve a pathway to formalize and mainstream the vocational education and skills development.

The University will be governed by an Executive Council (Board of Management) and Academic Council, whose job will be policy level direction. However, day to day operations will be undertaken by the Directors of Schools and Center Chairpersons, appointed by the Vice Chancellor. Faculty will be steering the academic administration, which will be supported by an adaptable and professional support staff. The University will have functionally autonomous and self-perpetuating governance structure. Management will be non-hierarchical and matrix type. Cross-disciplinary and performance oriented approach will be followed.

Faculty will be selected through open search with the criteria of merit and suitability. Faculty will have both tangible and intangible compensations that are best in the academia. The University will have full time, adjunct and visiting faculty members.

The program structure, curriculum and rules will be designed by respective schools and approved by the University. The University will be developed in a phase wise manner.

All the educational initiatives of the University will be accommodated in campuses in close proximity. To start with, the proposed University in Andhra Pradesh will require 20 acres of land, which has already been acquired. The estimated establishment/capital expenses, revenue expenditure and revenue income for one School, i.e. School of

Development has been estimated. Similar exercise is being done for other Schools, that will be started at the beginning.

Possible agencies such as Government of India, State Governments, companies in public and private sector and high net worth individuals will be requested for supporting the university through grants; sponsored research, consulting and training; and sponsored candidates.

#### **1.4 Chapter Plan**

This detailed project report has a number of chapters. After the Introduction, the second chapter elaborates the Existing Academic Initiatives of the Promoters. The third chapter indicates the academic plan of proposed university. The fourth chapter lists resource requirement for the proposed university and possible sources. The last chapter discusses governance and management of the proposed university.

## **CHAPETR II: EXISTING ACADEMIC INITIATIVES OF THE PROMOTERS**

### **2.1 Details of the Sponsoring Body: About the Centurion Group and its Educational Initiatives**

The Centurion Skills University, Andhra Pradesh, is being planned to be set up by the CSREM Trust, Bhubaneswar of the Centurion Group. The headquarter of the sponsoring body is located at Bhubaneswar, Odisha. The group owns and operates Centurion University of Technology & Management (CUTM), which is the first multi sector private state university in Odisha, established through an act of state legislative assembly in 2010. The core objective of CUTM is shaping lives, empowering communities and creating wealth and livelihood opportunities at the bottom of the pyramid. Its offerings include education, training, consulting and action research projects, particularly in Left Wing Extremism (LWE) affected districts of south Odisha and north coastal Andhra Pradesh.

The University leads a network of educational institutes delivering Certificate, Associate Degree, Diploma, Degree, Master, Doctoral Programs in Natural Sciences, Agriculture, Engineering and Management and other professional programs. It has campuses at Bhubaneswar, Parlakhemundi, Bolangir, Koraput, Rayagada & Keonjharin Odisha and Vizag & Hyderabad in AP. The University has established and operates Centurion School of Vocational Education in close partnership with various industries which is one of its kind in the country and enjoys numero uno status on many counts of measurement. It imparts ITI and Diploma education through Centurion Industrial Training Centers (CITCs), at nine locations in Odisha and Andhra Pradesh. In addition, the Centurion group also runs a number of Higher Secondary Science Colleges and Public Schools in Odisha especially in Left Wing Extremist Affected (LWEA) and Backward Region Grant Fund (BRGF) Districts.

The University is organized in the form of Schools: M. S. Swaminathan School of Agriculture; School of Architecture, Planning & Design; School of Basic Sciences; School of Engineering & Technology; School of Humanities and Social Sciences; School of Management; School of Media and Communication; School of Pharmacy and Life Sciences; School of Vocational Education & Training; and the Institute of Knowledge Society.

The University, positioned as an 'ecological institution', has incubated many social enterprises, social entrepreneurs, and outreach entities under the umbrella of Gram Tarang to bridge the gap between theory and practice. Its incubated organizations work pan India, in skill development, financial inclusion, urban micro-business services, entrepreneurship, tribal development, food processing and agriculture sector. It works in close partnership with universities, skill development agencies, industries, government bodies and civil society organisations.

The Gram Tarang Employability Training Service Pvt. Ltd. (GTETS) is an employment oriented skill building initiative focusing on socially and economically challenged segments of society, especially school drop-outs in rural and urban Odisha. Over 35,000 students have been trained through various programs in collaboration with the industry (Ashok Leyland, Godrej, Café Coffee Day, NALCO, Vedanta, Simplex, Navayuga, Utkal Alumina, REC) and various State Governments and Central Government. GTETS is a special purpose vehicle created by CUTM and one of the First partners of National Skill Development Corporation (NSDC) to help upscale its existing vocational training activities. It implements various skill building programs on going at CUTM. It has received recognition, accolades, appreciations and awards from UK – India Business Council, World Bank, FICCI and United Nations for its innovative employment linked skill development program which focuses on “hands on knowledge, experience based learning and practice oriented pedagogy”. First ever Mini Tool Room is also established under PPP (Planning Commission, Odisha Govt. and CUTM) mode under GTET.

The Gram Tarang Inclusive Development Services (GTIDS) facilitates provision of financial services to the bottom of the pyramid clients through about 9000 banking correspondents in partnership with technology partners such as Punjab National Bank, Andhra Bank, Indus Ind Bank, United Bank of India & Union Bank of India. Presently GTIDS operates in nine states and has the mandate to take this to 10,000 Gram Panchayats (GPs) by 2012. The Gram Tarang Self Help Cooperative (GTSHC) looks at rural Indian as a partner rather than a market and constructively engages with the local community, especially through women Self Help Groups (SHG) across rural Odisha, to source, produce and market various products ranging from soap and sanitary napkins to financial product like life insurance. The Gram Tarang Foods Pvt. Ltd. (GTFPL) undertakes value addition of agricultural produces near the source of production, through a process like spice oil extraction, and consequently offering alternative employment opportunities to local population.

The University has academic partnership with major universities of India and foreign countries. It has strong industry, government and NGO linkages through training, consulting and research. It has been ranked Number 1 in India for skill development of school dropouts. Centurion University has been internationally and nationally acclaimed for its 'skill integrated technical education' under the National Skill Qualification Framework and is in the forefront of debates on re-imagining the role of higher education institutions in Indian context. CUTM has been accredited with 'A' grade by NAAC in 2015. CUTM features as a Section 1 University in the Australian Government List of Educational Institutions in 2016.

The sponsoring body has a sound track record, experience and expertise in establishing and managing the University. The copies of the registration certificate, constitution and byelaws are presented in Annex 9. A special purpose vehicle, registered under Section 8

of the Companies Act 2013 will be brought in for the proposed Centurion Skills University.

## **2.2 Financial Resources of the Sponsoring Body**

The audited financial statements for last five years for the Centurion Group are presented in Annex 10.

## **2.3 About the Promoters**

The founders of Centurion Group are a group of Professors and serial entrepreneurs - Prof Mukti Mishra, (MA, MBA, PhD, Victoria University), APA Scholar and Former Professor, XIMB, Adjunct Professor (Victoria University – Australia and MDI – India) and Prof D N Rao, IIM (Kolkata), British Chevening Scholar and Former Professor XIMB - with excellent academic and administrative credentials. Having established the University, other academic institutes and social enterprises in the most remote and deprived areas of Odisha and Andhra Pradesh, they intend to undertake the task of building capacity of young minds of Andhra Pradesh more comprehensively through the proposed Skills University.

## **2.4 Innovative Initiatives (industry sponsored manufacturing and entrepreneurship)**

Centurion University's vision is to provide high quality, globally accredited academic programmes in technology and management, and in particular, provide globally accredited employability training for less endowed segments of the population. In addition, the University promotes entrepreneurial culture and enterprise in communities in the areas where it operates. Not least, the University - in purpose of achieving entrepreneurship and community development - also facilitates improved market access to goods and financial services for the target population. Many of these objectives are typically achieved via promotion of lighthouse project interventions in the target areas. The University finally imbibes its own values within its students and aims to produce graduates with social consciousness and empathy towards marginalized sections of the society. In summary, our mission is to become a globally accredited centre creating high calibre human resource particularly in the ability to catalyse sustainable livelihoods in less developed market regions of India and across the globe.

Our vision and mission are clearly stated on the University web site ([www.cutm.ac.in](http://www.cutm.ac.in)), but more importantly, they are reflected in many of the regular academic programmes conducted by the University. These values are elucidated unequivocally in all alumni / parent meetings and societal gatherings; communication of these values to society at large allows the University to build collaboration in pursuing its vision and mission.

### *Orientation of the University*

The focus and orientation of the University is articulated in LIVE, which stands for:

- **Learning:** Hands on, Experience based and Practice oriented
- **Ideas:** Make a difference through appropriate and relevant innovation and actionable research.
- **Value:** Shaping Lives and Empowering Communities and creating Nano- Mini and Micro enterprises.
- **Experience:** Quantifiable, Sustainable, Scalable and Replicable while striving to create a sense of ultimate delight among all stakeholders.

Faculty and staff of the University are always made a part of deliberations so that they absorb these institutional values and in turn, communicate them at their own level to other stakeholders such as students and parents with whom they regularly interact. The University frequently conducts training programmes and workshops that strengthen the value-based research and academic pursuits of various departments. This is done so that stakeholders understand the University's policy and social commitment towards knowledge dissemination. The establishment of University headquarters in deep rural hinterlands itself speaks of our commitment towards catalyzing sustainable livelihoods in less developed markets as articulated in its mission.

Perhaps the best known endeavor of the University towards making its larger societal and community development vision a reality is its establishment of the Gram Tarang set of platforms that are aimed at Research & Skill development among rural and peri-urban youth, and particularly the most disadvantaged from these areas. The University continues to pursue its end goal of contributing to economic, environmental and educational sustainability and rather than offering conventional courses, offers a range of hands-on programmes; students engage in a variety of project and apprenticeship experiences across its academic programmes on one hand, and skill & development programmes on the other. This validates the core purpose of the University, while strengthening the foundation of professional knowledge for its students.

### **INDUSTRY SPONSORED MANUFACTURING AND ENTREPRENEURSHIP HUB:**

A unique feature of the University will be the setting up of industry sponsored manufacturing and entrepreneurship hub as part of the government land which the University will acquire.

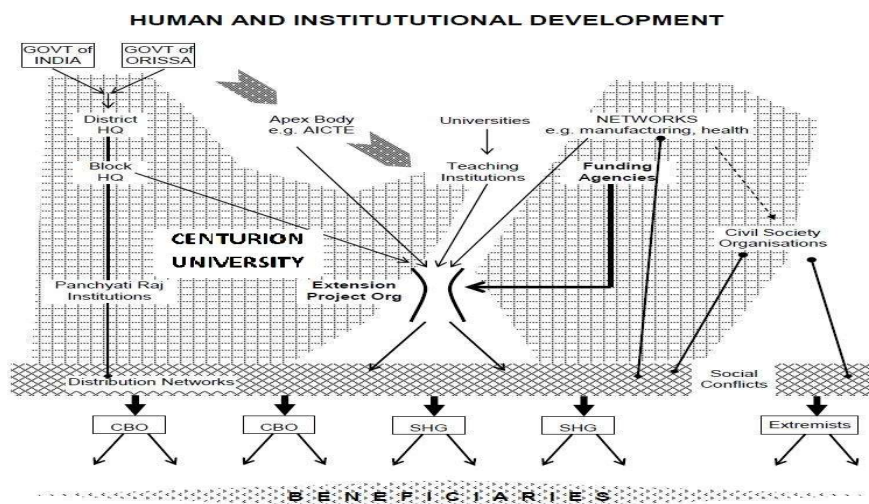
The hub will have industrial units and service training facility sponsored by industry majors in apparel, automobile service and ancillary. It will also have a driving training institute, CNC based manufacturing, bio technology and tissue culture units. Such units

will also encourage partnered production as well as training and internship for the trainees and students.

*Curriculum Design & Development*

The University frequently conducts internal and third party assessment for design and development of its curriculum. Based on the various studies conducted by the national and international agencies, field experience of senior management and staffs, and a deep socioeconomic understanding of the regions within which it works, the University has decided that a focus on the skill gap and employability of India’s technical graduates is what is critical. It is generally felt that Indian higher education is high on abstract concepts and less on practical understanding. Hence the university has decided to concentrate on skill development through a number of education and accreditation pathways. As a result, even the University Act of Odisha noted the incorporation of a School of Vocational Education and Training (SVET) as part of the University.

The Mission Map of the University is conceptualized as shown in the following diagram



This is the first time in India that such a School is part of a University Act. As a model for integrated learning and training, the University also looks to Australian Universities, as well as the Community College experience in the United States. That the University has been a pioneer in this field may be understood from the fact that after more than full four years of this university coming into existence, UGC has mandated all universities to focus on vocational education and skills. Thus Centurion University is a trend setter in India, showing how skills education can be viably and effectively integrated into higher education.

In order to align the university BOS towards skills, at various stages, the curriculum is shared with various Sector Skill Councils. The SVET thus becomes the action learning lab for all the other schools and departments of the University. The Gram Tarang



platforms play a similar role for the University, completing the “loop” of practicing what the University teaches through emphasis on its values, mission and vision.

The University is developing itself as a “Skills University” in India, taking further the model that it believes should be replicated nationwide. All its effort at faculty and curricular development are toward this goal. While the curriculum is maintained in quality and scope, flexibility in selection of courses that match the interest of the students is made possible through introduction of free electives. In other words the curriculum is designed along a semi cafeteria approach, thus self-organizing the students towards better employability. Moreover, the openness imparted in the selection of free electives within the University and also from online open source courses (or MOOCs) combined with industry-inspired relevant courses designed to meet industry sector requirements, together enhance the employability potential of the students.

The University has included the skill courses prescribed by various Sector Skill Councils as per National Skill Qualifications Framework (NSQF) into the curriculum to make our graduates more acquainted with industry-relevant learning. Steps are taken to align the course outcomes with National Occupational Standard (NOS) and Qualification Pack (QP) as prescribed by the framework. Thus the new engineering curriculum has embedded practical teaching within theoretical courses. A student can now focus as much as 80% of her individual curriculum on hands-on, practice based courses (leading from Level 1 to Level 8 of the framework). The University is a national leader in aligning its engineering curriculum with the NSQF framework. Further, it contributed to the development of NSQF by pioneering its own Centurion Skill Qualification Framework (CSQF) much before NSQF was created, and hence created a foundation upon which future skills training and accreditation frameworks could be built. The University has also significantly contributed to the evolution of NSQF via constant engagement and idea exchange with NSDC, NSDA and various Sector Skills Councils. The SSCs are members in the BOS and are constantly in touch with the University. Curriculum related guidelines provided by these bodies are incorporated. In addition to the engagement with NSDC, NSDA and with crafting the NSQF guidelines, Centurion University has also impacted national engineering education by facilitating Engineers Australia support for India’s application for Washington Accord membership. Further, NSDA has recently tasked the University with aligning its automobile engineering curricula with NSQF as a pilot to demonstrate the concept. The University is represented in all international and national skill regulators and innovating groups, and is widely understood to be a pioneer in both implementation, and policy formulation in the Skills sector. Even in English language teaching, the University is pioneering pedagogical methods; the British Council for developing appropriate curricula for English teaching has consulted us.

Industrial activities like shop floor management and production with best practices are embedded into the structure and curriculum of the University. Practice is indeed the reason the University exists. Rather than simply consulting with stakeholders, they are genuinely involved in design, delivery and assessment. The University has multiple

cross-sector industry certifications, multiple agreements with industries, as well as industry sponsored laboratories (or training and demo workshops).

Another major innovation of the university is related to its teaching pedagogy. The University is working on building continuous engagement in hands on skills within its engineering curriculum. Students are encouraged to learn through action in the management discipline as well. The University undertakes electronic delivery of its course curriculum, focusing on “e-classrooms”. The University has also been among the first to introduce tablet based learning systems for its students. But most importantly, this innovation comes from being developed in-house by the University’s students and faculty. This demonstrates that the University has been able to foster the spirit of continuous learning and innovative pedagogy among its own community.

One example of doing things differently is that the University has been organizing a series of CSR (Cultural-Sports-Responsibilities) activities in order to provide students with multiple kinds of scope for developing critical thinking, project & team management, and entrepreneurship skills. These CSR activities have been made mandatory (every student has to put in 30 hours of work per semester during the 3<sup>rd</sup> to 6<sup>th</sup> semesters). This helps students become better at self-learning, and also imbues them with good leadership qualities. In addition to course-bounded learning, students are trained to identify and articulate problems that exist in contemporary technological society and through interviews and discussions, formulate a solution. This exercise occurs as part of their regular activity in the “Life Skills Development” laboratory. The University is one of the few in the region to encourage industry internships as a part of the curriculum. This also leads to better placement of the students. Additionally, the University aims to provide in-house internship in some sense, by providing business incubation support to its students, faculty and alumni to encourage in-house enterprise and entrepreneurship; entrepreneurship is one of the primary goals of the University. Additionally, the University has pioneered work integrated diploma programmes under the NSQF and has piloted them under some sectors. The University has also pioneered innovative HR policies to attract and retain faculty especially in its rural campus.

As the university is delivering programmes in applied fields, research spirit is encouraged among students, through undertaking live industrial or social problems as projects. The University offers specific courses which make students think originally and look for new and efficient ways of looking at problems. The University’s focus on teaching, practice and production give rise to interesting challenges for students and faculty. In their CSR clubs (these include robotics, radio operations, aero modeling, GIS mapping, e-commerce) students grapple with interesting research areas such as CFD, web designing, open source software; it challenges their thinking and kindles interest in applied science, technology, and management.

The University is providing financial support in the form of a startup grant (i.e. seed money) to its own faculty for initiating research in selected fields. There is also a policy

of financial support, by which funds are extended to the faculty and graduate students to publish their research in journals as well as present at conferences around the country. Finally, the University itself gives due recognition to innovative research by delivering a citation to faculty members and graduate students during annual meetings. The various development and social outreach projects conducted by the University provide faculty members an opportunity to contribute to (and experiment with) their research ideas, this includes our faculty's work on using a super critical CO<sub>2</sub> extraction method for extracting oil from various flowers and spices (as is being applied in our own technologically-based agri-development project at our rural campus).

The University runs a specialized programme in "Development Management" which is led by a set of faculty (as well as the University promoters themselves) all of whom are highly reputed in the development sector, and have extensive experience of working with civil society. The University has a "Social Laboratory": it has supported and nurtured a community NGO that works in the impoverished Tribal districts of Andhra Pradesh and Odisha (called BREDS), and has also recently incubated a Micro Business Center for enterprise development in urban slums (in partnership with the State Government of Odisha). Most significantly, the University pioneered the Gram Tarang Financial Inclusion initiative which brings financial and banking services for villages in the remotest parts of India. Both students and faculty are immersed in these social laboratories during summer project periods.

University's mechanical engineering department is a recognized as small-scale industry and has EPM registration so as to conduct actual production. Remarkably, the department has a vendor license from HAL, Unipart and RSB global and does regular production as required; this is a first for a University in India. All of these innovations and interventions means that the University has been able to improve placements, employability, and the skills of its students and faculty. This also leads to high impact course design and effective course delivery. From laboratories, the University has started moving to "practice workshops", thus taking another step that is unique in the context of Indian universities

## **2.5 Infrastructure Facilities**

The Centurion Group of Institutes have more than 200 acres of campus area and one million sq ft of built-up area across nine locations in Odisha (Jatni, Paralakhemundi, Koraput, Rayagada, Bolangir and Balasore) and Andhra Pradesh (Vishakhapatnam, Hyderabad, Kanchili and Pathpatanam). It has capacity for offering fully residential programs with separate dormitory facilities for men and women for over 900 trainees at any point of time or 6000-7000 youth per year. It has 200+ networked computers with round-the-clock Broadband 1 GB lease line internet connectivity and fully equipped Language Labs for soft skill development of students. It has 5 NCVT Affiliated ITCs offering Fitter, Electrician, Welder, Computer Operator, Hardware & Networking, Diesel Mechanic and MMV trades. CUTM has NSDC Funded workshops equipped with high

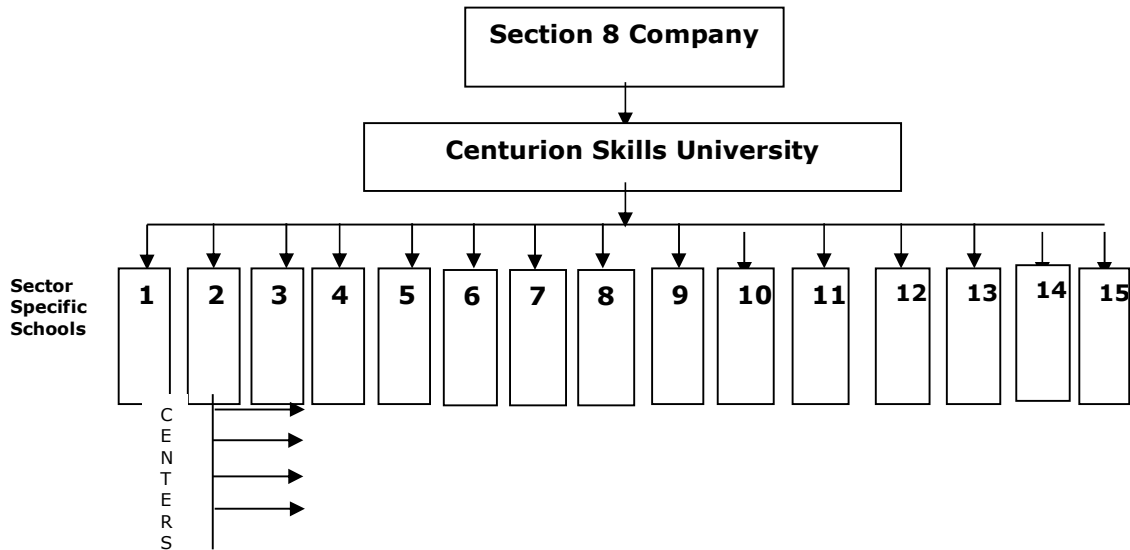
end machine tools including CNC Lathe, CNC Milling, etc. In addition, the University has fully equipped Mechanical Engineering lab, Civil Engineering, Electrical Engineering lab, Electronics and Communication Engineering lab, Physics and Chemistry lab and workshops for fitter and welder. Its training cum production facility is equipped with CAD/CAM lab.

### CHAPTER III: ACADEMIC PLAN OF THE PROPOSED UNIVERSITY

The proposed Centurion Skills University will be an institute of excellence in skill development, training and education with strong roots in local context. The university will have activities that have direct relevance to the local tribal and rural communities and region. Its objective is to generate new knowledge, strengthen existing body of knowledge base and develop tools, techniques and skills that are useful to its present geographical location and those in similar context. The activities of the University will include teaching, research, training, extension and consultancy related to skill development. It will operate through Schools under which different Centers (Departments) will be set up. In this chapter, organization of University and proposed schools and centers are discussed.

#### 3.1 Proposed Organization of Centurion Skills University

Organizing the activities of the University will be undertaken through three distinct elements and the interactions among them. These elements include University structure, systems and processes, and management of relationships within and beyond the university. The first element of the university configuration, the structure, is presented in Figure 2.1. Other two elements are discussed in the chapter on governance and management of the university.



**Figure 2.1: Configuration of the Centurion Skills University**

The Centurion Skills University will be headed by the Vice Chancellor for the day to day administration. Vice Chancellor will be supported by the Registrar for Academic Administration. The University will be organized in the form of different Schools. Each School will be specifically earmarked for the skill development of a socio-economic Sector. The Sector has been identified on the basis of Standard Industrial Classification

(SIC), National Occupational Standards (NOS) and National Classification of Occupations (NCO). Each School will be headed by a Director. Under the Director there will be Center Heads for different sub-sectors who will be responsible for the functioning of their Centers. Each School will offer skill based academic programs for students of different educational levels, including illiterates. Curriculum of National Institute of Open Schooling (NIOS) will be used to bring the students up to appropriate educational level required for that skill.

### 3.2 Proposed Schools and Centers

The Centurion Skills University will have the following Schools.

- i. School of Development Practices
- ii. School of Veterinary, Fisheries and Animal Husbandry
- iii. School of Data Sciences and ICT
- iv. School of Manufacturing
- v. School of Agriculture
- vi. School of Forestry
- vii. School of Construction
- viii. School of Utility
- ix. School of Mining
- x. School of Hospitality and Entertainment
- xi. School of Financial Services
- xii. School of Trade and Commerce
- xiii. School of Education
- xiv. School of Health and Wellbeing
- xv. School of Public System
- xvi. Any other School as per the requirement of the market and society to be decided by the Academic Council of the University

A brief description of each of the above schools and the Centers within are discussed below.

#### 3.2.1 School of Development Practices

The School of Development Services will have 5 Centers covering major subsectors within it.

Name of Center	Department for Skill Development and Activities
1) Centre for NGOs	1) Supporting administration of NGOs 2) Supporting in Program Delivery 3) Supporting in Community Mobilisation 4) Supporting in Advocacy
2) Centre for Disaster Management	1) Warning, Risk Management, Mitigation, Preparedness, Response, Recovery, Rehabilitation. 2) Capacity Development, Holistic & Continuous Approach, Proactive Strategy.
3) Center for Counselling	1) Therapeutic support 2) Coaching and mentoring
4) Centre for Aesthetics	1) Spiritual, Philosophical, Artistic, Expression of Love,

and Quality of Life	Beauty & Fine Arts.
5) Centre for Community Service Providers' Development	1) Development & Training of Resource Persons for supporting Community

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.2 School of Veterinary, Fishery and Animal Husbandry

The School of Fishery and Animal Husbandry will have 4 Centers covering major subsectors within it.

Name of Center	Department for Skill Development and Activities
1) Centre for Fishing & Aquaculture	1) Marine & Freshwater Fishing, Mariculture, Integrated Multi-Trophic Aquaculture, Netting, Handling catch, Preservation, Temperature and Water control, Microbial loads control
2) Centre for Animal reproduction	1) Raising of cattle and buffaloes, Sheep, Goatery, Poultry, Bee-keeping 2) Breeding, Housing, Foddering, Rearing, Milking, Meat production
3) Centre for Hunting and Trapping	1) Animals (dead or alive) for Food, Fur and Skin 2) Pets 3) Hunting and Trapping
4) Centre for Dairy Technology	1) Milk collection, Cooling, Transport, Storing, Standardisation, Pasteurisation, Homogenisation, Sterilisation, Drying, Fermentation, Coagulation, Processing, Freezing, Packing & Distribution

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.3 School of Data Sciences and ICT

The School of ICT will have 3 Centers covering major subsectors within it.

Name of Center	Department for Skill Development and Activities
1) Centre for Media Operations	1) Printing, Electronic, Web technology, Wireless, Satellite linkage
2) Centre for Broadcasting	1) Photography, Camera Operation, Set designing, Carpenter, Painter, Plaster, Layout, Character designer, Colour key, Story board, Compositor, Editor, Rendering & Roto artist, Script, Sound, Light
3) Centre for Telecommunications & IT	1) Computer science, Voice & Non-Voice, Biometric, Data entry, IT, IT- helpdesk, Software-Programming, Hardware, Technical writer, Support, Analyst, Developer, QA, IP, Packaging, Communication
4. Center for Data Sciences	Specialises in the area of data ware housing, data analytics and business intelligence

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.4 School of Manufacturing

The School of manufacturing will have 11 Centers covering major subsectors within it.

Name of Center	Department for Skill Development and Activities
1) Centre for Chemicals and Pharmaceuticals	1) RM-Procuring 2) Chemical Injection Systems 3) Acid Handling 4) Desulfurisation 5) Reactors 6) Craking 7) Isomerisation 8) Reforming 9) Alkylation 10) Disproportionation 11) Polymerization
2) Centre for Automobile/Auto-Components	1) Loading & Unloading 2) Packing 3) Parts Picker 4) Machining 5)Welding 6) Casting 7) Painting 8) Auto-body Repair 9) Welding 10) Foundry 11) Machine Tool 12) Automated Assembly Line
3) Centre for Operations and Maintenance of Equipment and Facility	1) Power Production 2) Steam Engine & Boiler 3) Incinerator 4) Welding, Foundry & Casting 5) Piping structure 6) Fluid Transfer 7) Erection and Commissioning 8) Machining
4) Centre For Electronics Hardware	1) Circuit Design, Imaging and Hardware Design 2) Moulding and Soldering 4) Resistors and Capacitors 5) Mounting Components 6) Depanel, Cleaning and Drying 7) PCB Assembly 8) Television Repair 9) Set-up Box
5) Centre For Textiles, Garments and Leather	1) Fiber Preparing 2) Weaving and Knitting 3) Tailoring and Dress Making 4) Pattern Making, Cutting, Sewing and Embroidery 5) Leather Product and Shoe Making 6) Winding 7) Hydro extraction 8) Extruding 9) Spinning and Tensioning 10) Hot Stretching, Stabilizing, Crimping and Cutting 11) Marking, Sewing, Thread sucking and Ironing
6) Centre For Food Processing	1) Weighing, Sorting, Grading, Mixing, Emulsification, Batch Preparation, Can Filling, Poly-packing, Double Seaming, Canwashing, Retorting, Cooling, Labelling, Shrink-Wrapping, Palletisation 2) Milk Storing, Pasteurising, Regenerative Heating, Homogenizing, Sterilizing, Cooling and Packing
7) Centre For Handlooms and Handicrafts	1) Procurement, Chemical Treatment, Winding, Warping, Wefting, Warping, Denting, Weaving, Designing, Mending 2) Terracotta Making, Clay extraction, Clay preparation, Extrusion, Forming, Drying, Coating, Firing and Packing
8) Centre for Wood Technology, Home and Office Furnishings	1) Wood procuring, Cutting, Screening, Air drying, Kiln drying, Blending, Forming, Pressing, Cooling, Trimming & Sand polishing, Sheeting & Palletising
9) Centre for Glass, Ceramics, Ornamental Design	1) Procuring, Melting in Furnace, Bathing, Forming, Annealing, Finishing, Packing 2) RM receiving, Milling, Settling, Pressing, Drying, Sintering, Grinding, Cutting, Cleaning, Magnetizing, Sorting, Packing, Shipping.
10) Centre for Rubber Technology and Plastics	1) Procurement, Mixing, Extruding, Cutting, Pressing, Balancing, X-Ray, Tyre Building, Moulding, Milling, Injecting, Quality control, Extruding



11) Centre for Manufacture of Paper and Paper Products	1) Procurement, De-Barking, Chipping, Pulping, Chemical Pulping, Hydro-pulper, Refining, Screening, Cleaning, Paper making
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Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.5 School of Agriculture

The School of Agriculture will have 4 Centers covering major subsectors within it.

Name of Center	Department for Skill Development and Activities
1) Centre for Food Crop	1) Cereals 2) Pulses 3) Millets 4) Oil Seeds 5) Tea and Coffee 6) Vegetables 7) Fruits 8) Plant Nutrients 9) Pesticides 10) Irrigation 11) Land Development 12) Harvesting 13) Post-Harvesting 14) Marketing
2) Centre for Cash Crop and Non-Food Crop	1) Fiber crops (Jute, Cotton) 2) Rubber and Bamboo
3) Centre for Herbal & Medicinal Plants	1) Herbal and Medicinal Plants 2) Spices
4) Centre for Post-harvest Technology	1) Cleaning, Drying, Grading, Sorting, Sterilizing, Packing, Storing 2) Cooling & Refrigeration 3) Shipping

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.6 School of Forestry

The School of Forestry will have 3 Centers covering major subsectors within it.

Name of Center	Department for Skill Development and Activities
1) Centre for Afforestation	1) Silviculture, Pruning, Regeneration, Tending, Logging, Gathering and preparation of fire wood (Planting, Transplanting, Thinning)
2) Centre for Non-Timber Forest Product	1) Growing of Tendu leaves, Lac, Resins and Rubber-like Gums, Wild Growing Mushrooms, Truffles, Berries, Nuts, Cork, Balsams, Vegetable hair, Eelgrass, Mosses, Lichens, etc.
3) Centre for Timber	1) Growing of Standing Timber (Planting, Replanting, Transplanting, Thinning and Conserving of Forests and Timber Tracts)

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.7 School of Construction

The School of Construction will have 4 Centers covering major subsectors within it.

<b>Name of Center</b>	<b>Department for Skill Development and Activities</b>
1) Centre for Habitation and Facility Development	1) Residential 2) Commercial 3) Heavy Civil 4) Industrial 5) Environmental- Constructions 6) Landscaping 7) Design, Procurement and Post-Construction
2) Centre for Civil Engineering	1) Planning 2) Architecture 3) Construction 4) Geotechnical 5) Surveying 6) Environmental engineering
3) Centre for Electrical Engineering	1) Hand tools, Power tools, Measuring, Marking-out, Cutting, Bending, Jointing & Fixing 2) Electric Systems, Transformers, AC machines, Induction Motors, Rectifiers, Inverters, Generators, Connectors, Circuit breakers, Fuses, Bearing & Lubrication.
4) Centre for Air-conditioning and Plumbing	1) Air-conditioning 2) Plumbing 3) Water Supply and Storage 4) Sewage and Drainage

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.8 School of Utility

The School of Utility will have 7 Centers covering major subsectors within it.

<b>Name of Center</b>	<b>Department for Skill Development and Activities</b>
1) Centre for Petroleum Products	1) RM-Crude Oil, Pumping, Distillation, Gas processing, Amine Treating, Merox treating, Hydrotreating, Isomerization, Catalytic reforming, Cracking, Alkylation, Blowing.
2) Centre for Electricity Generation, Transmission and Distribution	1) Electricity Generation 2) Electricity Transmission 3) Electricity Distribution 4) Decentralised Power Production 5) Industrial Electricity System Maintenance 6) Commercial and Domestic Electricity System Maintenance
3) Centre for Refrigeration & Air Conditioning	1) Condenser, Heat Exchanger, Compressor, Thermostat control, Pressure control, Suction, Pumping, Filtering, Cooling process, Blower, Expansion Valve Erection, Commissioning, Operation and Maintenance
4) Centre for Water Treatment and Supply	1) Main line system, Water purification system, Pumping, Production, Transmission mains, Bulk water meter, Storage Reservoir, Trunk mains 2) Domestic Water Treatment and Supply

5) Centre for Effluent Management	1) Municipal Waste Management System 2) Industrial Waste Management System 3) Domestic Waste Management System
6) Centre for Transport & Logistics	1) Traffic Management System 2) Rail Transport 3) Road Transport 4) Water Transport 5) Air Transport 6) Logistics
7) Centre for Warehousing	1) Shipping, Receiving, Inventory systems, Tracking & Design , Pick & Pack, Docking

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.9 School of Hospitality and Entertainment

The School of Hospitality and Entertainment will have 6 Centers covering major subsectors within it.

Name of Center	Department for Skill Development and Activities
1) Centre for Home Services	1) Day care Services, Domestic care services, Home automation systems, Home appliances service, Movers & Packers, Pest control services
2) Centre for Food and Beverage	1) Food cooking 2) Food packing 3) Food serving 4) Mobile food vending 5) Catering 6) Restaurant Operation
3) Centre for Cultural Entertainment	1) Stage development and management 2) Literary, Music, Dance, Drama, Pala, Opera, Cinema
4) Centre for Libraries, Archives & Museums	1) Preservation, Care & Handling, Environmental Controls, Selection, Research & Training, Ethics, Cultural Objects Keeping
5) Centre for Sports & Recreation	1) Athletics, Outdoor & Indoor Games, Technology based Hawkeye, Snickometer and Hotspot, Aerodynamic balls, Simulations, 3D-CAD , 3D- Motion tracking 2) Parks, Beaches, Amusement Parks
6) Centre for Travel & Tourism	1) Ticketing, Cargo Operations & Management, Tour Operations & Marketing

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.10 School of Mining

The School of Mining will have 4 Centers covering major subsectors within it.

Name of Center	Department for Skill Development and Activities
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1) Centre for Mining Ores	1) Surface & Underground Mining, Sizing, Concentration, Froth Flotation, Electrostatic separation, Magnetic separation, Automated Ore Sorting, Dewatering 2) Hydrometallurgy & Geo-metallurgy, Cleaning, Grading, Pulverizing, Compressing
2) Centre for Oil & Natural Gas.	1) Off shore & On shore, RM Crude oil, Condensation, Acid Gas removal, Sulphur Unit, Tail gas Treating, Dehydration, Mercury removal, Nitrogen Rejection, NGL recovery (De-methanizer), Fractionation train & Sweetening Units 2) Pumping, Distillation, Gas processing, Amine Treating, Merox treating, Hydrotreating, Isomerization, Catalytic reforming, Cracking, Alkylolation, Blowing
3) Centre for Metal & Non-Metals	1) Mining, Forming (Bulk & Sheet), Milling, Turning, Threading, Grinding, Filing, Welding, Soldering, Brazing, Riveting, Heat treatment, Plating & Thermal Spraying
4) Centre for Quarrying	1) Digging, Conveyer, Jaw Crushing, Cone Crushing, Screening, Dewatering

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.11 School of Financial Services

The School of Financial Services will have 3 Centers covering major subsectors within it.

Name of Center	Department for Skill Development and Activities
1) Centre for Insurance	1) Insurance products and services 2) Claim settlement
2) Centre for Banking	1) Banking products 2) Banking services
3) Centre for Financial Intermediation	1) Micro-credit 2)Micro-saving 3)Micro-insurance 4) Remittance

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.12 School of Trade and Commerce

The School of Trade and Commerce will have 2 Centers covering major subsectors within it.

Name of Center	Department for Skill Development and Activities
1) Centre for Retail Trade	1) Retail store operation 2) Storage 3) Logistics
2) Centre for Wholesale Trade	1) Wholesale operation 2) Storage 3) Logistics

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.13 School of Health and Wellbeing

The School of Health and Wellbeing will have 4 Centers covering major subsectors within it.

<b>Name of Center</b>	<b>Department for Skill Development and Activities</b>
1) Centre for Human Health	1) Hospital administration 2) OPD support 3) Emergency Support 4) Intensive Care 5) Specialist Clinic Support 6) Supporting Medicine Outlet 7) Supporting Medical Equipment
2) Centre for Residential care	1) Assisted Living 2) Adult day Care 3) Home care
3) Centre for Nursing	1) Nursing education 2) Nursing support
4) Wellbeing	1) Preventive health care 2) Indigenous practices

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.14 School of Education Services

The School of Education Services will have 3 Centers covering major subsectors within it.

<b>Name of Center</b>	<b>Department for Skill Development and Activities</b>
1) Centre for Education	1) School, College and University Education Administration 2) School, College and University Education Support Services 3) Supporting Coaching Centres 4) Supporting Literacy Programmes
2) Centre for Training	1) Supporting Professional Training in legal, Accounting and Auditing
3) Centre for Scientific Research and Development	1) Supporting Natural Sciences, Engineering and Technology, Medical Sciences, Biotechnology, Agricultural Sciences, Social Sciences, Management Sciences and Humanities Research and Development

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.2.15 School of Public System Services

The School of Public System Services will have 5 Centers covering major subsectors within it.

<b>Name of Center</b>	<b>Department for Skill Development and Activities</b>
1) Centre for Administrative and Legal Services	1) Office administration, Reception, Financial Planning, Billing and Record Keeping, Personnel and Mail, Business, Trade Shows, Conventions, Conferences & Meetings, Credit Bureaus etc. 2) Judicial Bodies, Notaries Public, Civil Law Notaries, Arbitrators, Examiners &

	Referees etc.
2) Centre for Security and Investigation Services	1) Police, Bodyguard, security guard, Polygraph, finger printing, Intelligence agencies, etc.
3) Centre for Judiciary Services	1) Administration, Civil Courts, Criminal Courts, Executive courts, Legal Profession, Legal Education, District Courts, etc.
4) Centre For Fire Fighting and Emergency Services	1) Fire Fighting, Ventilation, Ambulance service, Tactical Response Team, Bomb Squad, etc.

Each Center will be headed by a Professor and supported by Trainers, Assistant Trainers and Demonstrators and Lab Instructors.

### 3.3 Centurion Vocational Qualifications Framework

The University strongly believes that vocational training cannot be successfully delivered unless the programs are fully residential. Since most of the employment opportunities provided at the end of the training require migration from the villages/smaller towns to the industrial centers, having a residential training program becomes the first step in helping the trainees to get attuned to living in a new environment. Moreover, a lot of the life skills like teamwork, sports, yoga, maintaining sanitation of dormitories & bathrooms etc. cannot be imparted to day-scholars or in distance mode.

#### 3.3.1 Key features

##### i. Credit Based Semester System

- Credit load for each semester will be 50.
- Credit load will be distributed in two parts, i.e. theoretical learning in the class room and/or experiential learning in the lab or field.
- Periodical assessment and feedback for improved performance.
- Encourages performance based learning-with definable competencies
- Flexibility for building ‘Learning Units’ through accumulation of credits over time and encourages multi-entry and exit.

##### ii. Qualifications are divided into levels and are aimed at providing multiple entry and Exit Points to students.

The qualifications framework can feed into the under graduate Engineering, Agriculture, Management and other academic programmes of the university. The qualifications have options for providing students, irrespective their education, a calibrated and guided entry into the other formal education system of different Universities.

##### iii. The Framework is a competency based model.

Each of the qualification is based on the vocational competencies required at various levels. The framework provides for direct or lateral entry into the framework up to a certain level.

- The framework assigns weightage to practical skills initially. Both theoretical and experiential inputs increase as the levels increase.
- The framework outlines competencies required at every level, the process of acquisition of such competencies and the methods assessment of competencies.
- Industry and potential employers will be closely involved in the course design, up-gradation, delivery, assessment and certification in each sector.

#### iv. Standardization of Courses

- CVEQF levels to be certified by University and based on NCVT
- Levels from 1-2 will be aligned with ITI level certification.
- Levels 3-4 will be aligned with Diploma level.
- Levels 5-10 will be merged with HRD system for progression to Bachelor, Master and Doctoral level
- Each course will include 3 major components, i.e. Basic Domain Knowledge of the sector, Specific Skill within the sector and Life Skill. Life Skill will cover Language, Communication, Personality Development, Community Knowledge and General Awareness. Yoga, Meditation, Health, Sanitation & AIDS awareness, Industrial Safety, Time Management, Team work, Industrial HR Practices (PF, ESI, Labour Rights, How to read a pay slip, etc.) will be part of all courses.

#### v. Recognition of prior Learning (RPL)

- Recognition of Prior Learning–assessment of Competencies (including literacy & numeracy skills) and certification.
- Bridge Course (is required) to fill competency gap in in line with NIOS

### 3.3.2 Level in the Vocational Framework

Level	Input Criteria	Equivalence	Duration
Level 1 Certification	Attended School and qualify in pre-assessment test and/or recognition of prior learning.	NCVT approved one year program	1 year
Level 2 Certification	Level 1 certification of University. Or 10 <sup>th</sup> pass certification from any recognized board	NCVT approved two year program	+2 years
Level 3 & Level 4 Certification	Level 2 certification of university Or 2 year NCVT ITI certification from NCVT approved institute Or 12 <sup>th</sup> pass certification from any board and has to qualify in pre assessment test.	Diploma second and third year equivalence	+2 years
Level 5, 6, 7	Level 4 certification of University	B.Tech 2 <sup>nd</sup> year	+3 years

Certification	Or Diploma from any recognized council	to final year equivalence	
Level 8 & 9	Level 7 or B. Tech	M. Tech level	+1 year
Level 10	Level 9 or M. Tech	Doctorate	+ x years

### 3.3.3 Credit System

Programme	Duration of course	Class hour credits	Practice credits	Credits per year	Total	Cumulative Credits	Certificate to be issued by University	Delivery mode
Level 1	1 year/ 2 semesters	15 credits	35 credits	50 credits	50 credits	50credits	Level 1 Certified Industrial Helper	Regular
Level 2	2 year/ 4 semesters	18 credits/ year	32 credits/ year	50 credits	100 credits	150credits	Level 2 Certified Technician	Regular
Level 3 and 4	2 year/ 4 semesters	20 credits	30 credits	50 credits	100 credits	250credits	Level 3 Certified Expert Technician	Regular
Level 5 Onwards	3 year/ 6 semesters	MERGED WITH THE BACHELOR PROGRAMME OF GENERAL UNIVERSITY						Regular

### 3.3.4 Sample Framework for Manufacturing Mechanical Stream

Level	Job Role	Minimum Duration	Competency to be Achieved
Level 1	Industrial Helper	01 Year	<ol style="list-style-type: none"> <li>1. Industrial Safety: self, equipment &amp; Tools</li> <li>2. Recognition of all types of hand tools, measurement Tools and the use of it.</li> <li>3. Basic equipment operation: simple machines.</li> <li>4. Measurement &amp; calculations.</li> <li>5. Fundamental behavioral aspects to be maintained in the industrial or work environment.</li> </ol>
Level2	Technician (Equipment Operator)	02 Years	<ol style="list-style-type: none"> <li>1.Perfection in use of precision measuring instruments</li> <li>2. Perfection in use of trade related machines.</li> <li>3.Ability to read the drawing and draw it with software Like Auto CAD or Proem.</li> <li>4. Development of skill set mentioned in the syllabi.</li> <li>5. Ability to work in drift system.</li> </ol>
Level 3 &	1. Supervisor Or	02 Years	Development of specific skill set in the syllabi



Level 4	2. Expert Technician Or 3. Process Planner Or 4. Quality Assurance Or 5. Maintenance & Plant Engineer		of respective branch.
Level 5,6,7	Graduate Engineer	03 Years	As per the guidelines of Skill University
Level 8, 9, 10	Management	Min 3 Yrs	

### 3.3.5 Sample of Proposed Courses

Sl .	Stream	Course	Course code	Duration of training	Entry qualification	Certification	Credits
1	Mechanical	Level 1 Certification for Mechanical Fitter	MC1L1	1 year	10 <sup>th</sup> pass	L1 certificate	50
2		Level 2 Certification for Mechanical Fitter	MC1L2	1 year	10 <sup>th</sup> pass+L1	L2 certificate (Equivalent to 2 yr. ITI)	50
3		Level 3 Certification for Mechanical Engineering	MC1L3	1 year	8 <sup>th</sup> pass	L3 certificate	50
4		Level 4 Diploma in Mechanical Engineering	MC1L4	1 year	10 <sup>th</sup> pass	L4 certification certificate	50
5	Electrical	Level 1 certification for Industrial Electrician	EL1L1	1 year	8 <sup>th</sup> pass	L1 certificate	50
6		Level 2	EL1L2	1 year	8 <sup>th</sup> pass	L2 certificate	50

		certification for Industrial Electrician				(Equivalent to 2 yr. ITI)	
7		Level 3 certification for Industrial Electrician	EL1L3	1 year	8th pass	L3certificate L4 diploma certificate	50
8		Level 4 Diploma in Electrical Engineering	EL1L4	1 year	10th pass	diploma L4certificate	50
9	Automobile	Level 1 Certification for Automobile Maintenance	AT1L1	1 year	8th pass	L1 certificate	50
10		Level 2 Certification for Automobile Maintenance	AT2L2	1 year	8th pass	L2 certificate (Equivalent to 2 yr. ITI)	50
11		Level 3 Certification for Automobile Engineering	AT3L3	1 year	8th pass	L3certificate	50
12		Level 4 Diploma in Automobile Engineering	AT4L4	1 year	10th pass	L4certificatio n certificate	50
13	Advanced Machining	Level 1 Certification in Machinist	MS2L1	1 year	8th pass	L1 certificate	50
14		Level 2 Certificatio	MS2L2	1 year	8th pass	L2 certificate (Equivalent	50

		n in Machinist				to 2 yr. ITI)	
15		Level 3 Certification for Advanced Machining	MS2L 3	1 year	8th pass	L3certificate	50
16		Level 4 Diploma Certification for Advanced Machining	MS2L 4	1 year	10th pass	L4certificatio n certificate	50

### 3.3.6 Training Methodology: Depth of Finishing

The basic objective of the Skill University is to promote provision of thorough technical training and build cognitive, practical, social and behavioral traits of candidates to make them employment ready in specific industry fields. Hence, importance will be given to experiential learning through practical hands on training; region, industry & candidate centric customized training; certifications recognized by local & global industry given through residential programs; and building strong industry linkages for employment linked training programs.

Modular approach will be followed to impart training. Continuous assessment will be undertaken to measure skill gaps. Technical Skills will be trade specific and will include modules of on the job training in live production environment. Soft Skills will comprise communication, presentation, self-management, work ethic & team work. Life Skills such as entrepreneurship, financial planning for self and family, stress management through yoga & meditation, AIDS awareness & sanitation will be offered.

Total quality management principles will be in place. There will be clearly defined Quality guidelines as follows:

- A clearly defined Curriculum or Syllabus
- Trainer Guide.
- Trainee Handbook.
- Trainee Workbook.
- Norms for Equipment & Trainers.
- Training Delivery plan.
- Assessment plan.
- Feedback Process.
- Certification Process.

Facilitation Guide will help the faculty and trainers on generic training skills – with focus on instructional, facilitation, pedagogic, administrative and communication skills. The Trainers' Guide- on the program per se – will focus on domain knowledge and skills being imparted. It will clearly articulate the distinct pedagogy for different skills & knowledge, equipment & machinery needed for delivering domain knowledge, props and audio visuals (where needed), a clearly laid out lesson plan for each session and key learning outcomes at the end of each session. The trainer's guide will also clearly mention safety measures and necessary precautions required to be taken both on the shop floor and off it (wherever applicable). Trainee Manual (or Guide) with Workbook- on the program per se- focusing on domain knowledge and skills being imparted will include exercises at the end of each module or session to test understanding. Where skills are being imparted to candidates who are not literate enough, the participants' manual will include several visuals. A section on basic health and safety measures (both on the shop floor and off it) will be included. A clearly laid out Module wise and Session wise, Training Delivery Plan will be prepared indicating name of the program, objectives (competencies/learning outcomes) to be achieved, duration, training aids/equipment used and training methodology. Equipment being used for imparting Training (such as tools & machinery, flipcharts, computers, projectors, whiteboards etc.) should be clearly listed out and made available in each Center. Reference Manual or Handbooks will be developed for post training and ongoing reference by the candidate.

The faculty/trainer will be certified, by an acceptable authority, in both domain knowledge as well as instructional skills. He/ She should have good communication and facilitation skills and the ability to deliver training in vernacular/local language where required, for ease of assimilation and should lay ample stress on health & safety measures as well soft skills.

### **3.4 Eligibility for Admissions**

#### **3.4.1 Overall Eligibility Criteria**

Admissions to different levels of the vocational training offered by the University shall be based on the premise that there shall be multiple entry points and exit points. The student who registers for any level will have a valid registration number for three years. The student can seek deferral at any time but must resume study within 3 years to complete the certification for the respective level. Candidates with disabilities shall be required to satisfy the prescribed medical fitness norms. Admission shall ordinarily close on a specified date before commencement of the first semester instruction, through a notification/academic calendar. Candidates shall have to register as before commencement of instruction in first semester and for lateral entry students in third semester. A student is allowed to attend classes only for those subjects that he / she has registered in a semester.

### **3.4.2 Level-wise Registration and Eligibility to Appear for Examination**

All registered students of the Skill University have to register for each of the levels they are required to study before commencement of a semester. Except in the first semester, where a student is automatically registered for all subjects of the semester, a student has to apply to the University in a specified format for subject-wise registration for the term with prescribed fees through his / her college Principal. The same will be scrutinized and registration confirmation will be given to the student.

During the course of study, the students may register in any number of (2<sup>nd</sup> semester onwards) backlog (failed) subjects of their previous semesters; preference being given to lowest possible semester in addition to the prescribed subjects of that semester. After completing each level, a student may register in any number of backlog (failed) subjects and attempt to clear them during appropriate semester examinations. The student once registered for a set of backlog subjects cannot change them during the semester. If a student does not secure a pass grade in laboratory subject, he/she has to clear the same as prescribed above. Efforts will be made to give the student extra practice hours for acquiring the skills.

A student must attend 75% of the classes for theory subjects in order to be eligible to appear for the end-semester examination. A time table detailing the schedule of classes will be given to each student at the beginning of the classes in the semester. An attendance record will be compiled at the time of each monthly test. Students with poor attendance will be notified. The guardian will also be informed through a letter. Letters will be issued to the student and the guardian in advance that he/she cannot undertake university examinations because of poor attendance.

### **3.5 Evaluations**

Each subject comprises four components such as - Theory items, Practical items, Sessional items and Production jobs or on Job training schedules. The schedule of these items along with their credit points for each semester shall be as per rules formulated by the academic council from time to time.

At the end of each semester, there shall be an examination (here after called end semester examination) conducted by the University as per the program announced at the beginning of each academic year.

Back paper examinations, if any, shall be held with the normal end semester examination. There will be an examination window every semester where all even and odd semester exams (regular and back papers) will be held. Students with backlogs shall clear their backlog subjects along with regular students of previous semester(s) in subsequent year or in the same year if a subject is offered in both semesters.

There shall be special examination for students who have completed the course work at any level and have backlog papers from last semester only. There shall be no re-totaling/re-checking for any subject of special Examinations.

Students who have been found to indulge in malpractice in the examinations and have secured “M” grade in any subject will be governed by the disciplinary action taken against them by the University. Such candidates will be allowed to appear at any of the subsequent examinations based on the action taken against them. Students who are absent at the examination in any subject will be awarded “S” grade. They are permitted to appear at the subsequent examinations in those subjects as backlog candidates.

The university may arrange for special classes, tutorials etc. for such failed students to make up for their deficiencies. The special examination may be held only at selected centers.

A student who has passed the end semester examination, but would like to improve his grade in a course Item can also register for the exam and appear for the same. However, such facility is available only for the external end semester examination. The higher of the marks of the two results will be taken into consideration for grading. There will be no bar on number of attempts a student can make for improvement of his/her grade.

All internal marks will be carried forward both for back paper and improvement examinations in the case of theory courses. In the case of failure in a practical/ sessional, the candidate is given the chance to improve his/her grade and obtain a passing grade by conducting additional work/ experiments as prescribed by the department.

### 3.6 Grading system

A nine point grading system on base of 10 shall be followed in the university. Categorization of these grades and their correlation shall be as under:

Qualification	Grade	Score on 100 percentage points	Point
Outstanding	“O”	90 & above up to 100	10
Excellent	“E”	80 & above but less than 90	9
Very Good	“A”	70 & above but less than 80	8
Good	“B”	60 & above but less than 70	7
Fair	“C”	50 & above but less than 60	6
Below Average	“D”	40 & above but less than 50	5
Failed	“F”	Below 40	2
Malpractice	“M”	.....	0
Absent	“S”	.....	0

Grade C shall be considered as average; Grade D shall be pass grade for theory courses and Grade C shall be Grade for practical/ Sessional/ Project/ Seminar. A student’s level

of competence shall be categorized by a GRADE POINT AVERAGE to be specified as SGPA- Semester grade point average and CGPA-Cumulative grade point average. It shall be basis of judging his/ her overall competence in the course.

### 3.7 Examination

The University has a policy of continuous evaluation system (i. e students will be able to improve on their previous score) for each theory, sessional, design, practical and project items. For this purpose the university will hold the following examinations.

- End semester Examinations at the end of the Odd semester course work (1<sup>st</sup>/3<sup>rd</sup> /5<sup>th</sup> /7<sup>th</sup> semesters)
- End semester examinations at the end of Even semester course work (2<sup>nd</sup> /4<sup>th</sup> /6<sup>th</sup> /8<sup>th</sup> semesters)
- Supplementary / Improvement Examination at the end of even semesters (2<sup>nd</sup>/4<sup>th</sup> / 6<sup>th</sup> semesters at the end of Odd semester course work and examinations).
- Supplementary / Improvement Examination of Odd semesters (1<sup>st</sup>/3<sup>rd</sup>/ 5<sup>th</sup> semester at the end of even semester course work and examinations).
- Special Supplementary/Improvement Examinations of seventh and eighth semester, for the benefit of candidates who have completed the course work of all eighth semesters and have backlogs only from seventh and eighth semesters, after the declaration of results of eighth semester.

The Improvement examinations are intended to enable the candidates to clear subjects/course Items of a semester with a better grade. It will be same as the supplementary examinations.

Details of evaluations of various items are given as under:

#### 3.7.1 Theory papers

(a) A theory paper will have 100% points. The weight age for the monthly tests and the end semester examinations will be as follows:

- |  |              |
|--|--------------|
| • Monthly Test – I of one hour duration              | =10%         |
| • Monthly Test- II of one hour duration              | =10%         |
| • Monthly Test-III of one hour duration              | =10%         |
| • End semester External Examination of 3 hr duration | =70%         |
| • <b>Total</b>                                       | <b>=100%</b> |

(b) The syllabus for each theory paper will have normally 3 modules. The three class tests will be nearly equi-spaced in Academic Calendar. The end semester examination is Comprehensive and will cover all modules. The academic calendar will specify the Examination period for all Monthly tests and the end semester examination.

(c) The Monthly Tests will be conducted at the School/Center level in the scheduled week and the Corrected papers have to be shown to the students within seven

calendar days. The Score out of 10 percentage points shall be sent to the University and informed to the students.

- (d) There is no compensatory Monthly test. If a candidate misses a Monthly test due to medical reasons, the candidate will make an application to the college principal, indicating the reasons for absence and supported by medical certificate from the Doctor. Compensatory percentage points, which correspond to the average of the percentage points secured by the candidate in the remaining two tests.
- (e) A candidate is deemed to clear (pass) a theory paper if he / she secure:
  - i. A minimum of 28% points in the End Semester Examinations (out of 70);
  - ii. A minimum of 40% points in the End Semester Examinations and the three class tests taken together (i.e. out of 100)

### 3.7.2 Practical papers

- (a) Syllabus of a practical shall specify the number of practical jobs/ practical experiments (works) to be done in a semester
- (b) A practical paper shall have 100 percentage points.
- (c) Each practical / experiment (work) shall have equal percentage point as its weightage.
- (d) A practical paper may have 18 to 24 contact hours/ week for 8 and 10 credits respectively. Time Table must provide for such contact hours.
- (e) A practical (experimental) work and its evaluation shall be completed in all respects within the allotted hours,
- (f) The teacher(s) concerned with the practical class shall maintain the reports of the candidates as well as the final scores assigned to them.
- (g) The center may arrange a compensatory practical class for a student who misses an experiment on medical grounds, if it is satisfied about the reasons for absence
- (h) The evaluation shall be based on the following percentage points for each experiment:

• Quality job	50 points	
• Understanding process for doing job		30 points
• Quiz/ Viva	20 points	
Total		100 points
- (i) Candidates are to be informed of the final evaluation (at the end of the semester) and opportunity to repeat experiments, if required.
- (j) Any student securing less than 50% points (out of 100) will be awarded F grade in the Practical. He/she can reappear and clear (pass) the practical at the next available schedule of Examination in the practical

### 3.7.3 Sessional papers

- (a) Sessional paper will carry 100 percentage points.
- (b) The syllabus shall prescribe the number of jobs and specific tasks to be performed in each job. All jobs in a sessional shall have more or less or same allotted contact hours and equal weightage.



- (c) A sessional job has to be evaluated based on the following considerations.
- |   |           |
|---|-----------|
| Quality of job                              | 50 points |
| Understanding of the job and related theory | 30 points |
| Quality of report Viva – Voce               | 20 points |
- (d) Each sessional work is to be completed during allotted hours in the class itself.
- (e) No sessional work can be done at home / hostel.
- (f) At the end of each sessional work, the evaluation will be done. The student is to be shown the score and told about weaknesses (if any).
- (g) If a student misses up to 35% of allotted sessional hours for a job on health ground, he/ she may make an application to the principal along with a medical certificate. A committee constituted by the principal may consider the application and beyond the regular allotted hours.
- (h) The teacher concerned shall maintain all records of the sessional at least for a semester for inspection by the University.
- (i) A candidates shall clear (pass) a sessional paper if he /she score minimum of 50 percentage points.
- (j) Any student securing less than 50 marks ('F' grade) in sessional may be allowed to repeat the sessional in the corresponding semester of the subsequent year.

### **3.7.4 Project Items or production exposure or on job training**

- (a) A project Item shall carry 100 percentage points.
- (b) Each candidate shall do a project interdisciplinary in nature. For an Industry based project, the co- Supervisor could be from concerned Industry. Project has to be practice oriented.
- (c) Evaluation of the production Exposure or job training:
- (i) Evaluation of a production exposure or job training will be done as follows.
- |   |           |
|---|-----------|
| . Sincerity and regularity maintained to training | 30 points |
| . Methodology and outcome                         | 40 points |
| . Ability to handle independent jobs              | 30 points |
- Total 100 points**
- (ii) The evaluation shall be done by a committee of teachers where the project supervisor shall be a member. His/her evaluation shall carry 50% weight age. The other members shall have 50 percentage weightage. For major project, an external expert shall be involved.
- (iii) Minimum score for a pass in project item is 50% points.

(iv) The chairman of the committee shall forward the score within the prescribed date to the University. He / she shall also maintain all records for inspection by the University for at least a semester. He / she shall submit a copy to the principal for records.

(v) Any student securing less than 50 marks (F Grade) in projects will have to repeat the project work in the corresponding semester of the subsequent year.

### **3.8 Industry Partners for different Schools: National and International**

Centurion University has a large number of active national and international partners from academia and industry. Each School will operate with partners from that Sector. Some of the pilot industries partners with whom Centurion University of Technology and Management is already working and will rope in for the University being set up in AP are indicated below. It is expected that their partnership will be available at the Centurion Skills University, Andhra Pradesh.

#### **Our Industry and Academic Partners**

- The University of Southern Queensland (USQ) Toowoomba, Australia
- University of California at Santa Cruz
- Indian Institute of Welding – IIW, Kolkata
- Dalmia Institute of Scientific and Industrial Research (DISIR), Rajgangpur
- Institute of Metals and Minerals Technology (IMMT), Bhubaneswar
- Central Tool Room & Training Centre, Bhubaneswar
- Birla Institute of Management and Technology, Noida
- National Skill Development Corporation(NSDC), New Delhi
- Great Lakes Institute of Management, Chennai
- Sports Education and Development Australia (SEDA)
- Fourth Ambit Technologies Pvt. Ltd., Kochi
- Indian Navy, Chilika, Khurda
- Center for Continuing Education,IIT, Chennai
- IBM, India Ltd., Bangalore
- Central Reserve Police Force, Bhubaneswar
- Genext Technologies Ltd.Accra,Ghana, W. Africa
- Deakin University, Australia
- Ministry of Skills Development and Entrepreneurship
- Schneider Electric
- Dassault Systèmes
- Genpact Atyati limited
- RSB Transmissions (I) Ltd., Dharwad
- Medica Synergie Pvt. Ltd., Kolkata
- Uniparts India Ltd.,Visakhapatnam

- Orissa Rural Development & Marketing Society (ORMAS), Bhubaneswar
- A.P. Khadi Village Industries Board, Humayunnagar, Hyderabad
- Orissa Hydro Power Corporation Ltd. Bhubaneswar
- Khadi & Village Industries Commission, State Office, Ministry of M.S.M.E
- Ministry of Panchayat Raj, Government of India
- W & CD Department, Government of Odisha
- Pearson VUE Authorized Centre, Bloomington
- Navayuga Engineering Company Ltd., Hyderabad
- Panchayati Raj Department, Government of Odisha
- IL&FS Cluster Development Initiative Ltd.
- Planning & Coordination Department, Government of Odisha
- Accenture
- Tata Motors
- Yamaha Motors India Sales Pvt Ltd.
- Godrej
- Hyundai Motors
- British Council
- Eicher Motors
- iCalibrator
- Edureka
- OPTCL
- Showhow2
- Pegasus
- Harsha Trust
- BREDS

### **3.9 Employability Assurance Plan**

The Skill University will reverse the value chain in traditional training models and will not look at placements as a post facto to training, rather it will pro-actively partner with the industry and civil society organizations to build industry linkages which will ensure a steady pipeline of jobs for candidates (e.g. Ashok Leyland, Café Coffee Day, Hotel new Marion, Navayuga, Vedanta, etc.).

The Skill University will operationalize and scale up only those programs which have an industry demand ensuring a high placement percentage. A team will work in industry interface, business development and placements. Industry partnerships will be absolutely important aspect in marking a sustainable business model around vocational training.

The Skill University will work with the curriculum development team to develop demand driven training programs, tailor-made to suit manpower requirements in emerging markets and integrates industry expertise into every training program, which is

spearheaded by industry mentors. It will also provide counselling to trainees through every stage of the training to ensure a trainee's job readiness, while simultaneously assessing industry requirements, thus matching the right graduate to appropriate placement. There will be an in-built feedback loop that provides for learning from the employee in hiring organizations thus regularly upgrading the training modules, 'On job training' will be part of the curricula, which besides hands-on knowledge will allow the institute to assess the students at risk for job prospects so that pro-active additional intensive training would be provided.

### **3.10 Approach and Initial Plan for Academic and Research Excellence, Including Accreditation to be Sought**

- The University will undertake teaching, training, consulting and research activities to empower the communities with whom it works and shape lives of students through the life-long learning process.
- The University will strive for excellence with national and global level accreditation in all its offerings.
- The University will offer all programs with an optimal mix of experiential and theoretical learnings with bias towards the former.
- Skill integrated higher education will be the focus of University.
- University will work in true partnership with government, market and civil society organisation in all its endeavours. The university will work towards colocation of industry and academia within its premises.
- It will continue to create and support management of institutions who implement the product, process and institutional innovation that come out of the university.
- The University will have strong footprints in all over India for education and skill development.
- The University will have process innovation in new-age teaching-learning methods for teachers and students.
- The University will be a repository of context specific knowledge of its natural, socio-cultural, economic and ecological environment.
- Each School of the University (engineering, management, natural science, social science, vocational education, architecture and planning) will work with national and global collaboration.
- It will have a student strength of 1000/year for graduate and higher education and 5,000/year for skill development of school dropouts.

- The University will create an enabling environment for co-learning and co-habitation of students from all levels and all economic strata.

**Back to the Future: Building job-readiness in the University for the future**

1. Focus from 1<sup>st</sup> year for creating job opportunity and making students ready for the job.
2. Try unusual models such as finishing schools, Accelerated learning experience, Internship, Certification, Internal projects, Education at employer location, Preparing for government job, New-age teaching, Redefining curriculum (context specific curriculum such as Time and Course flexible academic curriculum, Math foundation for engineers, English foundation for professionals), Outcome-based progress metrics, Showcasing what we do, Skill training (not engineering education), not treating Students as Commodity, Branding (Blog in Blog out), Cultural activities in the hostel, etc.
3. Facilities and services (innovations) to be provided
  - Whoever interested can learn
  - Start at any time for any number of students
4. Every student must be good at something (Foster parent to discover and nurture the intrinsic potential of the student, help build his/her CV and continue for at least 3 years for the same person)
5. Based on Basic Instinct (Programming, Machine, Gadget, etc.), Faculty Champion to lead to participate in competition.

## CHAPTER IV: RESOURCE REQUIREMENT OF THE PROPOSED UNIVERSITY

Based on the year-wise roll out of UG and PG courses and industry centers to be established, the key resource requirement of the proposed university, i.e. physical infrastructure, faculty and finance are discussed briefly in this chapter.

### 4.1 UG & PG Courses: Year-wise Roll-out and Enrollment of Students

Table 4.1 indicates the year-wise roll out of UG and PG Courses and enrollment of students.

**Table 4.1: Year-wise Roll-out of UG and PG Courses and Enrollment of Students**

Year	School	UG Course
2017	School of Veterinary Sciences	•B. Vet /D. Vet/ Skill
2017	School of Data Sciences	•B. Tech/ Skill
2017	School of Manufacturing	•B. Tech/ Diploma/ Skill
2017	School of Agriculture	•B.Sc./ Diploma/ Skill
2017	School of Development Practices	•Skill
2018	School of Forestry	•B. Sc./ Diploma/ Skill
2018	School of Construction	•B. Tech/ Diploma/ Skill
2019	School of Utility	•B. Tech/ Diploma/ Skill
2019	School of Mining	•B. Tech/ Diploma/ Skill
2020	School of Hospitality and Entertainment	•B. Sc./ Diploma/ Skill
2020	School of Financial Services	•BBA/ Diploma/ Skill
2021	School of Trade and Commerce	•BBA/ Diploma/ Skill
2021	School of Education	•B. Ed./ Diploma/ Skill
2022	School of Health and Wellbeing	•B. Sc./ Diploma/ Skill
2022	School of Public System	•BBA/ Diploma/ Skill

### 4.2 Physical Infrastructure: Phase-wise construction plan for the land and the preferred location

The physical resource requirement in the form of land, building, information and communication technology infrastructure, transportation fleet, laboratory equipment, library facilities, plant and equipment, sports infrastructure, etc. will vary from School to School. However, the requirement for a typical School e.g. School of Development Practices is presented in Annexure 4.

The facilities for sports and extracurricular activities will include a Football field, Badminton court, Basket Ball court, Tennis court, etc. Each of these facilities will be provided in a phased manner. Chapter 5, section 5.5 covers investment plans.

### **4.3 Faculty Recruitment Strategy and Year-wise Recruitment for PG & UG**

The faculty and support staff (academic and administrative) requirement of each School will vary. However, the requirement of a typical school e.g. School of Development Practices is presented in Annexure 4.

Working in the University will be more than a mere job. Faculty and staff will be welcome to be a fellow traveler in our mission to ignite positive social change through the development of quality human resources.

Faculty will participate in teaching, research, consulting and training, besides academic administration and service to the profession. Faculty will be steering the academic administration with the Director undertaking the day to day operations with support from professional staff in their respective Schools.

The application of a prospective candidate will be screened by a Screening Committee consisting of Director, concerned area coordinator (which has a term of 2 years) and a senior faculty member from another area. Based on the Screening Committee's decision, the candidate will be invited for a seminar, followed by an interview. Performance at the two levels will be assessed by the Selection Committee consisting of Director, one senior faculty from the concerned area, one outside expert, and a representative of the sponsoring body. Based on the Selection Committee's recommendation, Director will appoint the faculty in the appropriate scale taking into account candidate's experience. The Faculty Review Committee will decide the period of probation for a faculty, which may vary from no-probation to a period of maximum of one year.

#### *Confirmation*

At the end of 1 year, the Faculty Review Committee (FRC) will review the performance and based on its recommendations, the Director would confirm the appointment. If the appointee has not shown reasonable performance in academic duties, he/she would be given feedback for improvement with a given time frame. Accordingly, the probation will be extended (for a maximum of 1 year). If the appointee does not show any improvement, even after the extension of probation period, then the Director, based on the recommendation of the FRC could terminate his/her services.

#### *Faculty Review Committee (FRC)*

The FRC democratizes the decision process in the School. It facilitates the decision taken by the Director with reference to confirmation, probation, promotion, special incentive and termination. FRC consists of 3 senior faculty members nominated/elected by the faculty. The Director can co-opt one faculty for a given meeting.

### *Faculty Development*

Faculty will be given opportunity for training and exposure in the form of participation in workshops, organizing workshops, membership in professional bodies. Faculty can avail seed money, provided by the School, for undertaking research work in their area of interest.

### **4.4 Financing Sources**

The requirement of finance for fixed cost (capital expenses) and working capital will vary through different Schools. Section 5.5 covers financial plans.

### **4.5 Fee Structure**

The university is a not-for-profit enterprise. The fee structure is based on the revenue requirement of the University considering the grants received; income earned from research, consulting and training; terms and conditions of debt servicing and the affordability of the students. For the skill and Degree courses the annual tuition fee is expected to be about Rs 15,000/student and Rs 200,000/student/year respectively. Merit-based and need based scholarships will be available. Effort will be made such that no deserving student is denied education and training.

### **4.6 Plan for Pre-commencement Activities in Academic and Non-academic Areas**

After the approval by the Government of Andhra Pradesh for establishment of the University, all the required activities of organizing finance, and recruitment of key officers, faculty and staff of the University will be taken up. Simultaneously, land and infrastructure development, opportunity for leasing, curriculum development and admission process will start.



## **CHAPTER V: GOVERNANCE AND MANAGEMENT OF UNIVERSITY**

The governance and management of the Centurion Skills University are discussed briefly in this chapter.

### **5.1 Introduction**

The University is expected to participate in and contribute to the socioeconomic development of Andhra Pradesh and neighbouring states by means of socio-economically relevant skill development, research, education and applications. It will strive to inculcate the values of national integration, inter-religious acceptance, and eradication of illiteracy, poverty and other social evils.

The University system will be financially self-sufficient through its basic activities of teaching, training, research and consultancy. The University system will have an enabling environment to establish inter-institutional linkages within and outside the country.

Openness, transparency, sharing and mutual learning shall be the academic values of the university. It will encourage its students and faculty to reach the boundaries of learning in their various disciplines. They will actively collaborate with like-minded institutes and organizations in India and abroad. At the same time both faculty and students will be encouraged to engage in activities relevant to the society and local community. It will be run through consent and through clearly laid down processes and systems which will encourage open exchange of ideas and thinking.

The University will be fully autonomous while being accountable to the CSERM Trust and other stakeholders. The statute will clearly articulate the powers and responsibilities of the University, including well-defined division and separation of powers among the University authorities / bodies. The statute will have provision for broadening the role perspective of the University with effective linkages with other social sub-systems. Adequate care will be taken for the depoliticisation of the Campus, evolution of healthy academic environment and decentralisation of decision making by specific division of powers and responsibilities among officers. The University will strive to de-bureaucratise the administrative machinery by infusing academic thinking into the University administration. Flexibility in decision making and execution guided by academic rationale, without being technically bogged down to set rules and regulations will be adhered to.

### **5.2 Governance Structure and Functions of Key Officers of University**

The University will be governed by the statute with adequate inbuilt mechanisms for accountability and transparency to its stakeholders. Key entities, functionaries and officers that will govern and manage the University and its Schools and Centers include Trust, Executive Council, Academic Council, Chancellor, Vice-Chancellor, Pro-Vice-Chancellor, Registrar, Controller of Examinations, Finance Controller, Directors, and

Center Heads. Roles and responsibilities of each are discussed in this section. The organogram of the University is presented in Figure 5.1.

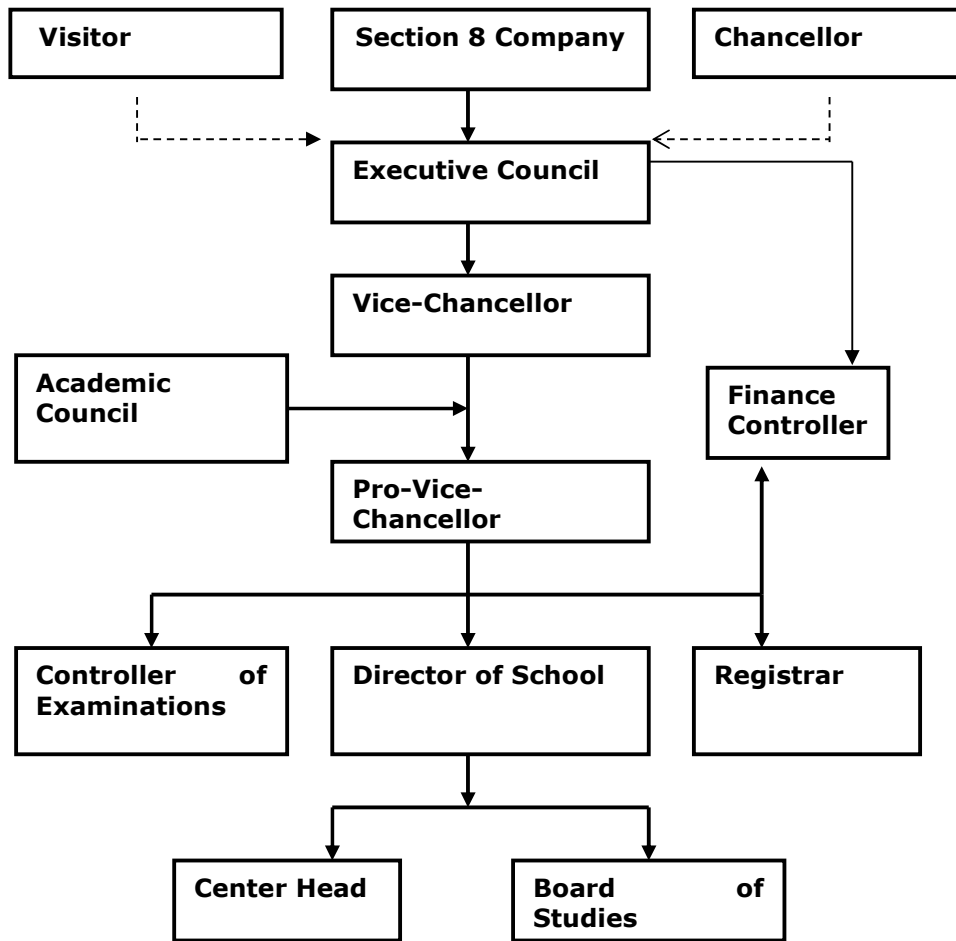


Figure 5.1: Organogram of the University

### Section 8 Company

The Schools that will be part of the University belong to Section 8 Company. All the residual powers that are not delegated explicitly shall be vested with the Section 8 Company.

**Visitor:** The Honorable Governor of Andhra Pradesh will be the ex-officio Visitor of the university.

**Chancellor:** The Chairman of the Board of Governors of the Section 8 Company will be the ex-officio Chancellor of the university.

The Statutes-making power, within the legal framework of the University Act, shall be with the University Authorities, viz., the Executive Council (Syndicate) and / or Academic Council. The Chancellor will not have the final authority of approving or

disapproving all the Statutes proposed by the University, though she/he will have the right to annul Statutes in exceptional cases where it is in conflict with provisions of the Act.

### **Vice Chancellor**

The Vice chancellor will have a five year term (subject to 65 year age limit) without a provision for re-appointment. The Section 8 Company will appoint a search committee consisting of the nominee of the executive committee and a nominee of the faculty body. The search committee will suggest and names in a panel for selection. The Section 25 Company will then recommend one name out of the panel to the Chancellor for appointment of the VC. The recommendation of the Trust will be binding on the Chancellor.

### **Pro-Vice-Chancellor**

The University can have one or more Pro-Vice-Chancellors, whose term will be co-terminus with that of the Vice-Chancellor. Pro-Vice-Chancellor's appointment will be made by the Executive Council on the recommendation of the Vice-Chancellor. The Registrar will carry out all directions of the Pro-Vice-Chancellor as she/he does those of the Vice-Chancellor.

### **Director of Schools**

Every School will be headed by a Director and she/he will be appointed by the Executive Council on the recommendation of the Vice-Chancellor. Director will have the overall responsibility for the development and management of the School. She/he will be responsible for curriculum development, research, extension, planning and monitoring, student welfare and human resource development. She/he will be responsible for designing of courses, by feeding the Boards of Studies/Academic Council with updated curricular changes; Co-coordinating the work of different Boards of studies and helping them evolve new and inter-disciplinary courses of studies and research. She/he will also be responsible for the execution and monitoring of the research schemes approved by the School. Additionally, she/he will organise and execute the extension programmes of the School university including extension education, participation in developmental activities by the faculty and the students, linkages with industry, national laboratories etc. The Director, through Center heads will be responsible for preparation of plans of the various Centers of the School, such as the aggregative and perspective plans, monitor the implementation of the plans and evaluate the outcomes periodically. The Director will also look after the campus amenities such as canteen, reading rooms, recreation centre, Co-operative Societies, Health care and other facilities for the students. The Director will be responsible for assessing the training needs of the teaching and non-teaching staff of the School and organise training and development programmes for them. She/he would

also be responsible for providing amenities for all employees and generally look after employee welfare.

### **Registrar**

The Registrar will be appointed by Trust through open advertisement, normally for a period of five years and without the provision for a second term. Registrar's term will be co-terminus with that of the Vice-Chancellor. The Registrar will be representing the University for all legal purpose. She/he will be assisting Vice-Chancellor in all academic and non-academic administration of the University.

### **Controller of Examinations**

The Controller of Examinations will be responsible for smooth conduct of the examination, evaluation of papers and declaration of result. The Controller of Examinations will be appointed by the Vice-Chancellor with the recommendation of the Executive Council.

### **Finance Controller**

There will be a Finance Controller who will be responsible for all the activities related to finance and accounts of the University. The Finance Controller will be appointed by the Section 8 Company and he/she will be a member of the Board. The Finance Controller will report to the Board.

### **Executive Council (Board of Management)**

The Board of Management will be the principal policy making body, responsible for framing Statutes/ Ordinances / Regulations, other than the academic ones which shall be in the sole purview of the Academic Council. The Board of Management (Executive Council) will comprise about 20 members such as:

1. Chancellor, Chairman of the Board
2. Secretary, Ministry of Rural Development, Government of India
3. Secretary, Department of Education, Government of Andhra Pradesh
4. Secretary, Department of Tribal Welfare, Government of Andhra Pradesh
5. Secretary, Department of Rural Development, Government of Andhra Pradesh
6. Two distinguished academicians from reputed Universities/ Institutes
7. Two distinguished professionals from the Industry
8. Two distinguished professionals from Civil Society Organizations
9. Directors of Schools
10. Two Faculty members (one Professor and one Associate Professor) of the University
11. Vice Chancellor, Vice-Chairman of the Board
12. One alumnus of the University

13. Registrar (Member Secretary)

14. Controller of Finance

The members in sl. no. 1 to 5, 9, 11 and 13 are ex-officio members. Members in sl. no. 5,6,7,9 and 11 are to be nominated by the Section 8 Company. The members in the Executive council will have a two-year term, with possibility of re-nomination, for not more than two times.

The Executive Council will have following powers/ functions.

- to review from time to time the broad policies and programmes of the University and to suggest measures for the improvement and the development of the University;
- to consider and pass resolutions on the Annual Report and the Annual Accounts, together with the Audited Reports of the University; and
- to render advice on matters referred to them by the Vice-Chancellor or another authority of the University.

The Board of Management will function as per the provisions of the Section 8 Company and shall have all such powers as delegated by it.

### **Academic Council**

The Academic Council will consist of all Directors, Heads of Centers and Professors of the University. The Academic Council shall be the final authority to decide on all academic matters and frame Statutes/ Ordinances/ Regulations relating to academic issues. There could be Standing Committee(s) of the Academic Council, wherever felt necessary.

### **Board of Studies**

Each School will have its Board of Studies for curriculum development. The Board of Studies will be chaired by the Director and will have all the Center heads, few Professors and external experts as members.

### **5.3 Organisation of a School**

The School is designed as an autonomous entity within the broad framework of the University. Typical structure of Governance and Management of the School; Support activities and facilities; and Phases of establishment of the School are presented in Annexure 6, Annexure 7 and Annexure 8 respectively.

## 5.4 Systems and Controls

There will be a number of systems and control mechanisms at School and University level to ensure high quality and transparency of service delivery and accountability to stakeholders. Key systems will include admission of students, curriculum development, program delivery, faculty and staff recruitment, HR development, HR compensation, HR administration, hostel administration, general administration, student training and placement, management development program administration, legal, public relation, facility development , operation and maintenance, etc. Generally a mix of administrative control, social control and self-control will be used.

## 5.5 Year-wise Financial Statements with Source of Funds

To start with, the estimated establishment/capital expenses will be Rs 15.3 crore to be financed by 40% equity/grant and 60% loan. The Centurion Group has approved loans of Rs 60 crores (equipment loan) from NSDC and Rs 20 crores (building loan) from OBC bank. Financial closure will not be a problem once approval for the University is given.

The annual expenditure is estimated as Rs 4.75 crore, Rs 13.81 crore, Rs 29.96, Rs 41.48, Rs 57.06 crore for first five years respectively. The estimated income that can accrue in years 1 to 5 are respectively Rs 4.6 crore, Rs 13.0 crore, Rs 31.5 crore, Rs 44 crore and Rs 61.5 crore. Thus, there is a gap of Rs 0.15 crore in 1<sup>st</sup> year, Rs 0.81 crore in 2<sup>nd</sup> year and break even in 3<sup>rd</sup> year. Investment Schedule and Income and Expenditure Statements are provided in Table 5.1 and 5.2 respectively.

**Table 5.1: Investment Schedule (Rs lakh)**

Sl	Year	Unit	Price	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	
1	Land (own) acres	31	12	372										
	Land (govt) acres	160												
2	Land Dev	31	10	310										
3	Boundary, Utilities, etc.			150										
4	Buidling (sq mt)	20000	0.20	400	400	400	400	400	400	400	400	400	400	
5	Equipment			300	300	700	800	800	800	800	800	800	800	
6	Industrial Hub				300	200	200	200	200	200	200	200	200	
7	Total			1532	1000	1300	1400	1400	1400	1400	1400	1400	1400	
8	GRAND TOTAL													13632
	Equity/Grant	at 40%		612.8	400	520	560	560	560	560	560	560	560	5452.8
	Loan			919.2	600	780	840	840	840	840	840	840	840	8179.2

**Table 5.2: Income and Expenditure Statement (Rs lakh)**

	Year	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
Sl	Item										
	<b>INCOME</b>										
1	Number of Students (regular)	200	500	1250	1750	2500	3000	3500	4000	4000	4000
2	Income (regular students) (@Rs 2 lakh/student/year)	400	1000	2500	3500	5000	6000	7000	8000	8000	8000
3	Number of Students (skill development)	400	2000	3000	4000	5000	6000	7000	8000	9000	10000
4	Income (Skill student) (@Rs 0.15 lakh/student/year)	60	300	450	600	750	900	1050	1200	1350	1500
5	Other Income (Training, Consulting and Research)			100	150	200	500	600	700	800	900
6	Manufacturing			100	150	200	250	300	350	400	500
<b>7</b>	<b>Total Income</b>	<b>460</b>	<b>1300</b>	<b>3150</b>	<b>4400</b>	<b>6150</b>	<b>7650</b>	<b>8950</b>	<b>10250</b>	<b>10550</b>	<b>10900</b>
	<b>EXPENSES</b>										
8	Educational expenses (salaries and consumables)	176	640	1200	1640	2200	2640	3080	3520	3720	3920
9	Depreciation	69	195	472.5	660	922.5	1147.5	1342.5	1537.5	1582.5	1635
10	Admin and utilities	115	325	787.5	1100	1537.5	1912.5	2237.5	2562.5	2637.5	2725
11	financial costs	46	91	220.5	308	430.5	535.5	626.5	717.5	738.5	763
12	Others	69	130	315	440	615	765	895	1025	1055	1090
<b>13</b>	<b>Total Expenses</b>	<b>475</b>	<b>1381</b>	<b>2995.5</b>	<b>4148</b>	<b>5705.5</b>	<b>7000.5</b>	<b>8181.5</b>	<b>9362.5</b>	<b>9733.5</b>	<b>10133</b>
<b>14</b>	<b>Net Surplus</b>	<b>-15</b>	<b>-81</b>	<b>154.5</b>	<b>252</b>	<b>444.5</b>	<b>649.5</b>	<b>768.5</b>	<b>887.5</b>	<b>816.5</b>	<b>767</b>

The Centurion Group has approved loans of Rs 60 crores (equipment loan) from NSDC and 20 crores (building loan) from OBC bank. Financial closure will not be a problem once approval for the University is given.

**Brief Description of Promoters**

The Promoters of the University were all involved at some point in their career in building and promoting academic excellence in the past. A brief detail of the promoters are presented below.

**Prof. Mukti Kanta Mishra**

Prof. Mukti Kanta Mishra is an academician of repute with three Masters and a doctoral degree to his credit. He is an alumnus of Victoria University, Melbourne where he studied as a Common Wealth scholar. His educational qualifications include Master of Applied Economics and Master of Public Administration from Utkal University, and Master of Business Administration and Ph. D. in Corporate Governance from Victoria University. He was the recipient of the best Ph.D. thesis award from the Victoria University, Melbourne, Australia.

Prof. Mishra has long years of experience in Academics and industry. He was a Professor of Marketing at Xavier Institute of Management, Bhubaneswar (XIMB). Prof. Mishra also taught students of MBA at Victoria University, Australia; Beijing University (China), Malaysia University, Singapore University, XLRI, Jamshedpur, and MDI, Gurgaon. His corporate experience includes senior management positions in Hindustan Petroleum Corporation Ltd (HPCL), India and Kinhill Engineers Pvt. Ltd. And BHP Billiton, Melbourne, Australia. Prof. Mishra is the Country Advisor-India to RMIT University which is the 54<sup>th</sup> largest university in the world.

**Prof D. Narasimha Rao**

Prof D. Narasimha Rao is an alumnus of IIM Calcutta. He was a British Chevening Scholar in entrepreneurship development at Durham University, UK with specialization in micro-credit and micro-enterprise. Prof. Rao worked as a faculty in Xavier Institute of Management, Bhubaneswar (XIMB). He was head of the Centre for Development Research & Training (CENDERET) the rural extension wing of XIMB in 1998 and steered it successfully for 7 years. Prof. Rao also taught at the XLRI, Jamshedpur. He was instrumental in setting the Consultancy Wing of XIMB.

He has about a decade and half years of experience with various non-profit organizations and government institutes including CAPART, Gram Vikas, etc. and worked closely with national and international agencies like DFID-UK, BILANCE-Netherlands, GTZ-Germany, MISEREOR-Germany and HIVOS-Netherlands among others.



### Definitions

1. “University” means – Centurion SkillsUniversity (CSU)
2. “Act means-Act of the Andhra Pradesh state legislature.
3. “Academic year” means-duration of year which starts from “1<sup>st</sup> August” and ends on 31<sup>st</sup> July.
4. “Semester “means- a group of some course which are offered during a time block of 6 months.
  - a) Odd numbered semesters like 01, 03, 05, 07 & 09 start from 1<sup>st</sup> August and ends on 31<sup>st</sup>January.
  - b) Even numbered semesters like 02, 04, 06, 08 & 10 start from 1<sup>st</sup> February ends on 31<sup>st</sup> July.
5. Training session “means – a time slot for a particular activity. Duration of Training class is either 60 minutes or 180 minutes. For examination it is called “Testing session” & it is either 180 or 240 minutes.

Sl.No	Course Type	Training session duration in minutes for training class	Testing session duration in minutes for end exam.
01	Theoretical training course	60 minutes	60 minutes
02	Practical training course	180 minutes	180 minutes
03	Drawing training course	180 minutes	180 minutes

6. Each year will be divided into two semesters and will consist of 50 credits. Each credit will be equivalent of 14 classes’ hours or 28 hours of practical either through lab, workshop, sectional or project. If the class room input is delivered in distance mode, one credit will be equal to 7 hours of input

7. “Academic programme” means- a collection of correlated courses- which one must successfully complete in order to earn a certification by the University. Certification may be by certificate, Diploma, Advance Diploma, Graduate Degree.

8. “Courses” means – any single component of an academic programmed (usually called as subject or trade practical) which one has to successfully complete, in order to earn a certification by the university. Course may be of different types like theory, practical, term work, drawing & project work .Each course is given a unique course code.

9. “ School Dropout” means (SD) any individual who have not passed the 10<sup>th</sup> board examination; He might have ability only to read and write in any one of regional language and the age bar is not less than 14 years and not more than 40 years.

10. “Study Centre” means a place where the places where students attend the training sessions and get other relevant services like delivery of instructional books, admission, examination and communication with university head office.

11. “Program Coordinator “means a person in-charge of administrative and academic affairs at the study center. He plans the availability of counselors, looks after the distribution of instructional material arranges and coordinates training session.

12. “Study Center head” means-the head of the study center who is normally the Principal of the institute, where study center is located. HE may not participate in the day to day activities of the study center but will play an active role in case of any serious problem at the study center.

13. “Direct Admission (DA)” means – due to higher pre-qualification than specified minimum eligibility, after receipt of the application in the prescribed format along with supporting documents students shall be directly admitted to:

- i. Specified higher semester and
- ii. All those courses at lower semester which are not exempted
- iii. There is exemption possible for experienced industry professional for the practical courses also for which they have to appear a test specified by university.

Direct admission shall be given only when student apply for it, in a prescribed format along with:

- a) Payment of specified fees and
- b) Attested photocopies of specified documents.

14. “Course Exemption (CE)” means-the student who successfully complete with normally minimum 50% or better marks in specified subjects with similar syllabus but with different evaluation pattern, in the exams conducted by the either board or university, are exempted from certain course of these programs. If course exemption is sanctioned, the student need not appear in any examination for that course or subject, as it is treated as a successfully completed. But no previous performance is used for reporting in mark sheet. Only mark of exemption, that ‘X’ is put against exemptions shall be given only when student apply for it in a prescribed format along with photocopy of specified documents.

15. “Credit Transfer (CT)” means –the student who successfully completed specified subjects with similar syllabus and evaluation pattern, in the exams conducted by the either Board or university are exempted from certain courses of these programs.If credit transfer is sanctioned, the student need not appear in any examination for that course, as it is treated as a successfully completed. Previous marks (or in case of grades, equivalent mean marks of the grade range) are used as it is for reporting in Mark Sheet. Students are allowed to apply for credit transfers only once before the fresh admission. Credit transfers

shall be given only when student apply for it, in a prescribed format along with (1) payment of specified fees and (2) attested photocopies of specified documents.

**Details of a Typical School: School of Development Practice**

The purpose of the School of Development Practice is to provide skilled manpower for the development sector in general and community based organisations in particular. It will help to bring in sustainable livelihood security, facilitate access to basic services and strengthen claims to rights and entitlements of rural and urban households belonging to underprivileged sections of the society.

The skilled manpower will help the community to organize itself into groups, articulate its vision and plan for achieving it. The groups will take charge of implementing these plans, fine-tuning these on an on-going basis, and monitoring and reflecting on the progress they have made. Groups access goods and hire competent service providers to implement and sustain the interventions they have planned. However, in many areas, the community does not get the quality goods and services it requires. In order to deliver high quality goods and services at reasonable rates and in a predictable manner, NGOs plan to develop a pool of capable resource persons, or Community Service Providers (CSPs), from among the members of local community. Further, NGOs plan to engage with the community to help it play the role of a discerning and assertive client/consumer of the goods and services.

**2. Objective of the Program**

The broad objective of the program is to create a class of locally embedded CSPs, who are also service users, for different development interventions. The skill enhancement training program for the CSPs starts with the premise that this vocational education and training would not only ensure better quality services and the much required specialized handholding for the farmers but also an alternative vocation for this pool of dedicated village youths thereby catering to the rural employment needs. CSP development has the overall purpose of local value addition, local market creation and local self-sufficiency using local resources, appropriate technology and market principle.

The programme thus aims to provide right knowledge and skill, and inculcate right attitude in CSPs to undertake the practical tasks of technical handholding essential for demonstration of several livelihood and other interventions. CSPs are expected to extend quality service to the member-farmers for the sake of better adoption of newer techniques and/or reviving existing practices. Community organization to which CSP is embedded will require sensitization to develop community ownership of and extract services from the CSPs. The existing CSP-member farmer relationship will evolve to a higher plane through a virtuous cycle of active organizational learning while keeping NGO's relationship with them as a transient phenomenon.

Certification is envisaged to bring rigour to the curriculum. Certified CSPs are expected to have higher self-esteem. To ensure that the CSPs are retained within the parent

community based organization, specific training will be undertaken to develop appropriate institutional culture.

The specific objectives of the program are:

- (i) To standardize the existing CSP training programs
- (ii) To certify the CSPs who have completed the CSP training programs
- (iii) To establish the certification process for the ongoing CSP programs and certify them after completion of the program

### **3. Scope**

CSP programs in operation by NGOs in Andhra Pradesh and other neighbouring states of the country will be standardized and certified. It will also develop fresh CSPs.

### **4. Features and Name of the Program**

The key features of the CSU CSP certification program include:

#### **i) Credit Based System**

- Periodical assessment and feedback for improved performance.
- Encourages performance based learning-with definable competencies
- Flexibility for building 'Learning Units' through accumulation of credits over time and encourages multi-entry and exit.

ii) Qualifications are divided into levels and are aimed at providing multiple entry and exit Points to students. The qualifications framework can feed into the under-graduate rural management program of the university. The qualifications are aimed at providing participants, irrespective of their education, a calibrated and guided entry into the formal education system of the University.

iii) The Framework is a competency based model. Each of the qualification is based on the vocational competencies required at various levels. The framework provides for direct or lateral entry into the framework up to a certain level. The framework weights practical skills initially. Theoretical inputs enhance as the levels increase. The framework outlines competencies required at every level, the process of acquisition of such competencies and the methods assessment of competencies.

#### **iv) Standardization of Courses**

- Certification levels to be certified by University
- Levels from 1-2 will be aligned with ITI certification.
- Levels 3-4 will be Diploma level.
- Levels 5-10 will be merged with HRD system for progression to Bachelor, Master and Ph.D.

- v) Recognition of prior Learning (RPL)
- Recognition of Prior Learning –assessment of Competencies (including literacy & numeracy skills) and certification.
  - Bridge Course to fill competency gap through National Institute of Open Learning System (NIOS)
- vi) NGO's involvement in curriculum design, delivery and certification in each specialization is mandatory

### **Program Name and Credit System**

After successful completion of the program, the CSP will be awarded Certificate in Community Service (CCS) with the domain name in the parentheses. For example, the CSP trained in natural resource management will be awarded CSP (NRM). Each CSP will be certified at the level of her/his achievement. Table 1 indicates the details of certification levels that will be considered at the CUTM for CSP assessment. Table 2 indicates the credit system for CCS.

**Table 1: Certification Level and Related Details**

Level	Pre-requisite	Equivalence	Duration/ Cycles
Level1 Certification	Attended School and has to qualify in pre-assessment test for recognition of prior learning	Certificate	1year/ 3 Cycles
Level 2 Certification	Level 1 certification of University Or 10 <sup>th</sup> pass certification from any recognized board and has to qualify in pre assessment test for recognition of prior learning	Advanced Certificate	+1 year and 3 Cycles
Level 3 Certification	Level 2 certification of university Or 12 <sup>th</sup> pass certification from any board and has to qualify in pre assessment test for recognition of prior learning	Diploma	+2 years and 3 Cycles
Level 4 Certification	Level 3 certification of university	Advanced Diploma	+1 year and 3 Cycles
Level 5 Certification	Level 4 certification of University Or Diploma from any recognized council and has to qualify in pre assessment test for recognition of prior learning	Graduate	+3 years and 3 Cycles
Level 6 Certification	Level 5 certification of University Or Diploma from any recognized council and has to qualify in pre assessment test for recognition of prior learning	Graduate	+3 years and 3 Cycles
Level 7 Certification	Level 6 certification of University Or Graduate from any university and has to qualify in pre assessment test for recognition of prior learning	Post-graduate	+2 year and 3 Cycles
Level 8 Certification	Level 7 Or Post-graduate from any university and has to qualify in pre assessment test for recognition of prior learning	M. Phil	+ 2 years
Level 9 Certification	Level 7 Or Post-graduate from any university and has to qualify in pre assessment test for recognition of prior learning	Doctorate	+ x years

**Table 2: Credit System of the CCS**

Program me	Cumulati ve Duration of course	Class hour credits/ year	Practice credits (PDCA)	Credits/ year	Total Credit	Cumulati ve Credits	Certificat e to be issued by Universit y	Delivery mode
Level 1	1 year/ 2 semesters	15 credits	35 credits	50 credits	50 credits	50 credits	Level 1 Certified CSP	Regular on site
Level 2	2 year/ 4 semesters	18 credits	32 credits	50 credits	100 credits	100 credits	Level 2 Certified CSP	Regular on site
Level 3	3 year/ 6 semesters	20 credits	30 credits	50 credits	150 credits	150 credits	Level 3 Certified CSP	Regular on site
Level 4	4 year/ 8 semesters	20 credits	30 credits	50 credits	200 credits	200 credits	Level 4 Certified CSP	Regular on site

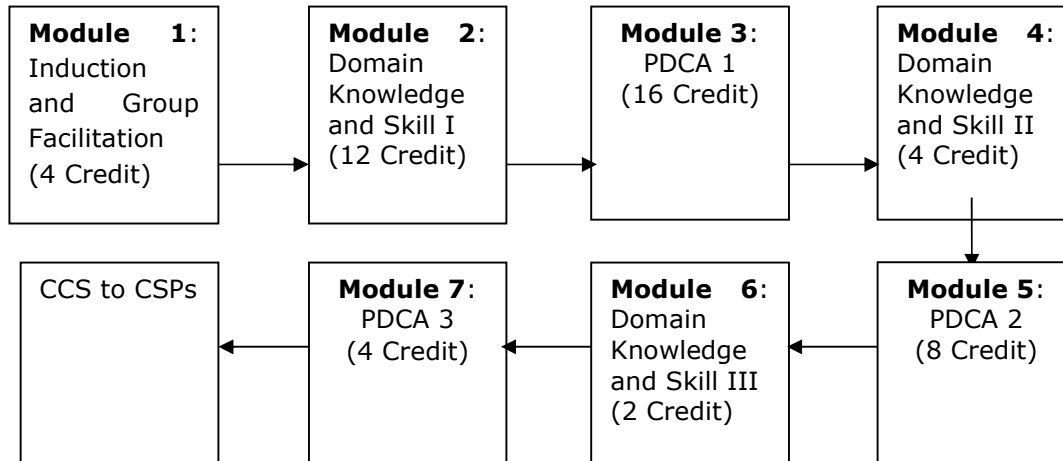
NB: From Level 5 onwards, the program will be merged with the Bachelor program in Management of the University.

## 5. Structure of the Program and Curriculum

The Certificate in Community Service (CCS) for CSP comprises of number of modules. Each module is designed in such a way that the principle of adult learning, i.e. action-reflection-action is practiced in letter and spirit. Theoretical and conceptual learning in the class room is integrated with experiential learning in the field. The CCS program comprises three generic segments, i.e. Induction and Group Facilitation, Domain Knowledge and Skill Development, and PDCA. PDCA refers to Plan, Do, Check and Act. It refers to the application part of the concepts learned. The participant needs to Plan for the task to be implemented. Then the participant implements (Do part). Subsequently, the participant Checks with reference to the expected result. Finally, the participant Acts, if there is no deviation between expectation and achievement. The PDCA concept is used as a tool for Total Quality Management and is borrowed from Deming.

Each Segment can have different modules. For example, the CSPs in CCS (NRM) are first trained for Group Facilitation. The ‘Domain Knowledge and Skill Segment’ involves NRM Perspective and Hamlet Based Planning, Crop Production, Crop Protection and Designing INRM structure. The PDCA segment includes undertaking Hamlet based planning on optimal resource use, Training groups of women on crop production, Training Groups of women on plant protection, and Implementing Appropriate INRM Structures, Doing Measurement and Preparing Muster Roll. After the first cycle of Domain Knowledge and Skill training and PDCA, two more cycles are undertaken for the CCS program. Figure 1 indicates a typical program structure.





**Figure 1: Program Structure of CCS**

Every CSP needs to complete a number of cycles (2 to 3 depending on the nature of specialization) of a set of modules to be eligible for completing the CCS. The CCS will have 50 Credit, distributed among the sub-modules. 1 Credit is equivalent to 10 hour of class room session. 1 hour of class room session is equivalent to 2 hour of field work. Different modules in Figure 1 are briefly explained below taking CCS (NRM) as an example.

**a. Induction and Group Facilitation (4 Credit)**

- i) Orientation to CCS and CSP capacity building (0.5 day/4 hour)
- ii) Understanding importance of Group (0.5 day/4 hour)
- iii) Understanding process and dynamics of the group (1 day/8 hour)
- iv) Developing skills to intervene (1 day/8 hour)
- v) Field work: Group observation and facilitation in 6 meetings (10 days/80 hour)
- vi) Consolidation and assessment (1 day/8 hour)

Module 1 covers 32 hour of class room session and 80 hour of field work including assessment.

**b. Domain Knowledge and Skill I (12 Credit)**

*a. NRM Perspective and Hamlet Based Planning*

- i) Components and their interrelationship and concept of INRM (1 day/8 hour)
- ii) Family need identification, current practice and its implication (1 day/8 hour)
- iii) Carrying capacity of the village, different alternatives (vegetative and structural measures, intercropping) to show that family needs can be met sustainably through optimal use of village resources (1 day/8 hour)
- iv) Understanding market that includes commodities, their prices and sources (1 day/8 hour)

- v) Exposure to different measures for soil-moisture conservation on different lands (2 days/16 hour)
- vi) Consolidation and assessment (1 day/8 hour)

*b. Agriculture I*

- i) Crop production techniques which includes nursery raising, transplantation, post transplantation care, nutrient application, irrigation, harvesting, post harvest, storage, land preparation, producer level value addition (2 days/16 hour)
- ii) Method of training villagers which includes practice sessions in the villages (1 day/8 hour)
- iii) Consolidation and assessment (1 day/8 hour)

*c. Agriculture II*

- i) Plant protection and safety measures (2 days/16 hour)
- ii) Method of training villagers which includes practice sessions in the villages (1 day/8 hour)
- iii) Consolidation and assessment (1 day/8 hour)

Module 2 covers 120 hour of class room session including assessment.

**c. PDCA I (16 Credit)**

- i) Hamlet based planning on optimal resource use (15 days/120 hour)
- ii) Training 3 Groups of women on crop production (15 days/120 hour)
- iii) Training 3 Groups of women on plant protection (15 days/120 hour)

Module 3 covers 360 hour of Field work including assessment.

**d. Domain Knowledge and Skill II (4 Credit)**

- i) INRM Structure design
  - a. Designing, estimate preparation, site selection and lay out of Different INRM structures (30X40, staggered trench, water harvesting structures, lift irrigations, field bunding and land leveling) (2 days/16 hour)
  - b. Measurement of earthwork (0.5 day/4 hour)
  - c. Muster roll preparation (0.5 day/4 hour)
- ii) NRM perspective and hamlet based planning (0.5 days/4 hour)
- iii) Crop production (0.5 days/4 hour)
- iv) Plant protection (0.5 days/4 hour)
- v) Exposure visit (0.5 day/4 hour)
- vi) Consolidation and assessment (0.5 day/4 hour)

Module 4 covers 44 hour of class room study including assessment.

**e. PDCA II (8 Credit)**

- i) Site selection, INRM structure design, estimation, layout and muster roll preparation in three villages (15 days/120 hour)
- ii) Hamlet based planning on optimal resource use (2 days/16 hour)
- iii) Training 3 Groups of women on crop production (2 days/16 hour)
- iv) Training 3 Groups of women on plant protection (2 days/16 hour)

Module 5 covers 168 hour of Field work including assessment.

**f. Domain Knowledge and Skill III (2 Credit)**

- i) INRM structure design (1 day/8 hour)
- ii) NRM perspective and hamlet based planning (0.5 days/4 hour)
- iii) Crop production (0.5 days/4 hour)
- iv) Plant protection (0.5 days/4 hour)
- v) Exposure visit (0.5 day/4 hour)
- vi) Consolidation and assessment (0.5 day/4 hour)

Module 6 covers 28 hour of class room study including assessment.

**g. PDCA III (4 Credit)**

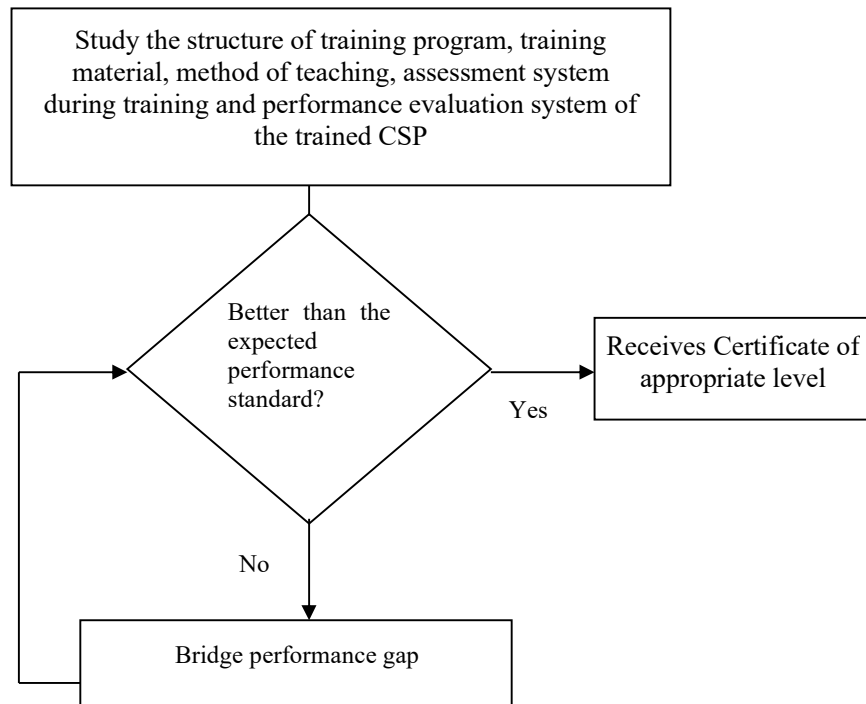
- i) Site selection, layout, INRM structure design, estimation and muster roll preparation in three villages (2.5 days/20 hour)
- ii) Hamlet based planning on optimal resource use (2.5 days/20 hour)
- iii) Training 3 Groups of women on crop production (2.5 days/20 hour)
- iv) Training 3 Groups of women on plant protection (2.5 days/20 hour)

Module 7 covers 80 hour of Field work including assessment.

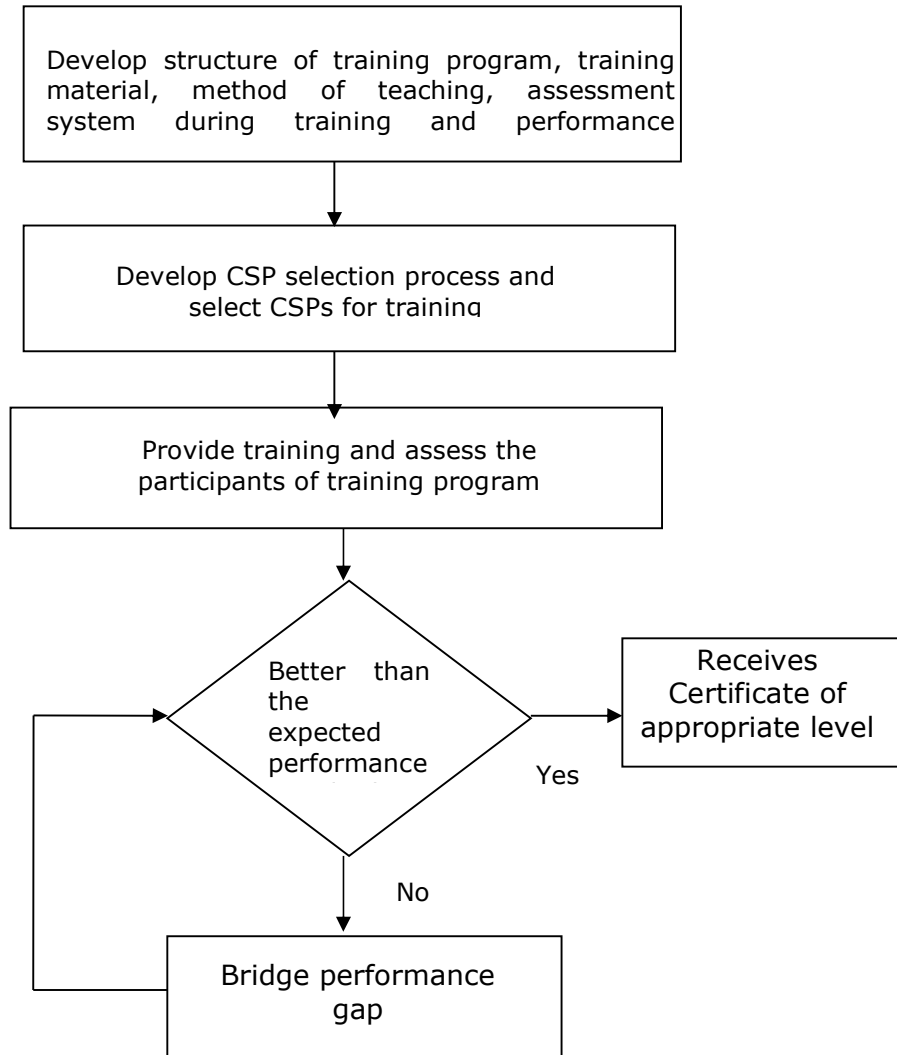
**6. Program Administration**

The comprehensive conduct of the CCS, including its design, enrolment and program delivery shall be the responsibility of the “CCS Committee”. The CCS Committee will be comprised of two faculty members from CSU and a Professional from NGOs. One senior faculty from CSU will be the Program Coordinator. She/he will be designated as CCS Coordinator. The terms of reference of the CCS Committee will include:

- (i) Amendments and additions to provisions of the CCS Rules and Regulations;
- (ii) Interpretation of the CCS Rules and Regulations;
- (iii) Matters relating to academic discipline;
- (iv) Guidelines for evaluating the performance of participants;
- (v) Decisions on matters related to unsatisfactory performance; and in consultation with the Center Head, appropriate action; and
- (vi) Any other matter, as may be referred to the Committee by the Center Head.



**Figure 2: Certification of Trained CSPs**



**Figure 3: Certification of Freshers**

The CCS Coordinator shall be responsible for the day-to-day administration of the CCS and ensure that the program meets all the necessary rigour of the University. The CCS Committee may co-opt any other faculty member and Professional from NGOs as and when required. Figure 2 indicates the certification process of those CSPs who have already been trained. Figure 3 indicates the certification process for the fresh candidates.

**Master Plan of the University and General Layout of Schools of Development Practice**

Each School building will comprise three distinct blocks, i.e. administrative and classroom block, hostel block and faculty residence & guest house block. There will be common facilities for recreation such as gym, swimming pool, football field, tennis and basket ball courts, jogging track, etc, in addition to auditorium, open air theater, cafeteria, bank, post office, dispensary, community center, etc. The General Layout of the University is attached.

The Administrative Block & Classroom blocks of each School will consist of:

- Director's office
- Director's lounge
- Director's room
- Reception
- Guest lounge
- Faculty rooms
- Office Room (Gen administration)
- Conference Hall
- Classrooms
- Computer room
- Library room
- Support staff rooms
- Seminar/ training halls

The University will use appropriate and eco-friendly technology.

**Details of a Typical School: Faculty, Infrastructure and Funding Requirement for the School of Development Practice**

The faculty, infrastructure and funding requirement of the School of Development Practice are presented below.

**1. Faculty Requirement**

It is proposed to have about 10 full time faculty (2 in each center), considering the critical mass that will be necessary for a Center to have a significant impact in the form of action research, teaching, training and consultancy. To start with, faculty support from the Schools of Centurion University of Technology and Management (CUTM) will be roped in. External faculty resources will also be used. Faculty will be grouped under different Centers. Broadly, faculty will be divided into two categories on the basis of effort put into core tasks. Teaching and training will be one category of core tasks. Second category of core tasks will be action research and consulting. It is expected that each faculty will devote 60 to 70% of time to his/her core task. It is not the intention that the teaching and training faculty will not be involved in action research and consulting or vice versa. The purpose of having various faculty in such a manner is only to direct this valuable resource of the institute in a focused manner and develop such resource with time. Additionally, it will shape the policy for faculty recruitment. General criteria of open search, merit and suitability will be used for the faculty selection and promotion process. Faculty competence development will be continuous and will be given high priority. The incentives, both tangible and intangible will be competitive in the academia. Faculty growth and institute's growth will be treated at par.

For enhancing effectiveness of the faculty in their activity, adequate number of research associates/faculty associates/teaching assistants will be provided. Faculty will be encouraged to design and float courses and they should be allowed enough time to pursue their own research and publications. Proactive and faculty that is engaged in research and publications is a huge advantage in adding name and fame to the university.

**Details of a Typical School: Support Activities, Facilities and Requirement of the School of Development Practice**

The support activities, facilities and requirement of a typical school, such as the School of Development are presented below.

**1. Placement Activity of the School**

The institute will organize a placement program for the successful candidates in variety of development and corporate entities engaged in development in rural and urban areas. The program will offer specialization in second year to meet knowledge and skill requirements of these organizations. In specific terms the potential employees will include NGOs working in rural and urban areas, agribusiness enterprises in cooperatives and corporate sector, banks and other financial institutes, national and international funding agencies, corporate houses engaged in discharging their social responsibility, and development agencies of the government.

**2. Research and Consultancy Activity of the School**

Skill development policy research and consultancy for the development sector will be one major activity of the School. The Centers will conduct both independent and sponsored research with a view to push the frontiers of knowledge and strengthen the curricular resources. Efforts will be made by each Center to solicit collaboration from national and international academic institutes and scholars of repute. Faculty from different Centers will facilitate development of new institutes in the region to address skill development. School will provide space to faculty to incubate such instituteal innovation.

**3. Management Development Program of the School**

The School will be actively involved in helping existing institutes to improve their human resource through executive development programs. Institute will have both on and off campus programs for this purpose. This activity will be managed by a coordinator, designated for the purpose.

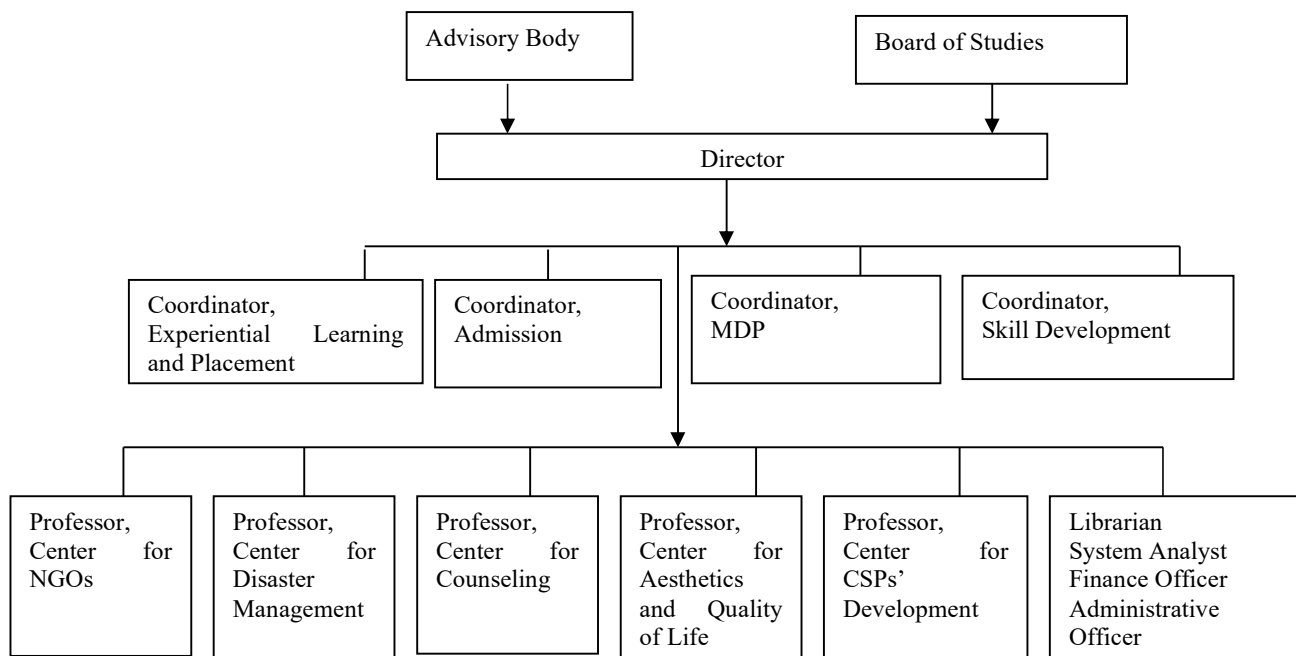


**Details of a Typical School: Governance and Management of the School of Development Practice**

The governance of the School will be vested with the Advisory Board and the Board of Studies. Members of the Advisory Body will be representatives from the institutes of government, industry and development sector and eminent persons from Academics. Chairperson of the Advisory Body will be an Academician. The Director will be appointed from the faculty by the Vice Chancellor, based on the recommendation of the Advisory Body to the Trust and its (Trust) approval, for a period of three years.

The Director will be the Ex-officio member secretary of the Advisory Body and Board of Studies. The Advisory Body will guide the School to achieve its objective. The Board of Studies will have members from the academia, both within and outside the institute. It will be the custodian of Curriculum, make necessary changes at regular intervals and suggests research direction. The overriding philosophy will be functionally autonomous and self perpetuating governance system with democratic and self control type organization culture.

The organization structure will be non-hierarchical, matrix type and faculty driven. Cross disciplinary performance oriented team approach will be the functional norm. Coordinators for different function and Centers will report to Director for policy issues. Coordinators will have complete functional/administrative autonomy in their respective areas.



**Figure 1: Governance and Management Structure of the School**

Besides number of committees, the Director will be the formal link among different Centers/Coordinators for horizontal integration. There will be systems in place for regular communication among the faculty, say through monthly faculty meeting. Coordinators for each Center, to be selected by the faculty of that Center, will have two year rotating term. Other Coordinators (for the administration of skill developmnet, MDPs, research publications, etc.) will be appointed by the Director, also for a period of two years.

**Strategies for Attracting, Retaining and Developing Faculty Resources**

The University believes that one of the pillars of its strength is faculty (other pillars being, governance system, physical infrastructure and student and alumni). Accordingly, faculty will be part of the major decision process, shape University's future and drive towards it through their active involvement in academic and non-academic administration.

In each School/Center, faculty will be divided into two broad categories on the basis of effort put into core tasks.

For enhancing effectiveness of the faculty in their activity, adequate number of research associates/faculty associates/ teaching assistants will be provided.

The University will follow in letter and spirit following idea of Late prime-minister Jawaharlal Nehru.

A University stands for humanism, for tolerance, for reason, for the adventure of ideas and for the search of truth. It stands for onward march of the human race towards ever higher objectives. If the universities discharge their duties adequately, then it is well with the Nation and the people.

Faculty will be the key force in adhering to the above philosophy for the existence of the University.