## 7.3.1 Portray the performance of the Institution in one area distinctive to its priority and thrust within 1000 words

## The Distinctiveness of Centurion University's Model of Integrating Skills with Higher Education

Centurion University of Technology and Management (CUTM) gains its distinctive edge by redefining, redesigning and constantly innovating in delivery of outcome-based education with a missionary focus on the learner and imparting the knowledge, skills and behavioral traits needed to shape their futures. The pedagogical framework and approach is by integrating *hands-on-knowledge*, *experiential-based*, *practice-oriented pedagogy* through internal internships and extensive industry exposure which provides a progression from traditional learning in the classroom to applied learning in the laboratory and finally into action learning in a live production environment.

CUTM chose a unique path of setting up a traditional University with a strong social and community outreach through its skilling interventions eventually getting recognized by

- a) Government of Odisha as a Skills University,
- b) by the Ministry of Skill Development & Entrepreneurship, Government of India as the first multi-sector *Center of Excellence* and
- c) by National Council of Vocational Education & Training as the awarding body for NSQF skill certifications.

CUTM is working towards this mission of building human resource capability through education, skilling and competency development that ensures employability. Entrepreneurial skills are also strongly developed and encouraged, and several startups have been incubated through the Center for Commercialisation of Innovators & Entrepreneurs (CCIE).

The distinctive model of CUTM has universality and relevance evident from its ability to meet the skilling needs of the youth of remote tribal youth of Odisha, AP & Assam to the multitudes of international students coming in from the continents of Australia, Africa and Asia to learn at the University campuses. The model has been cited

- a) by name in the UN General Assembly debate on Right to Education;
- b) acknowledged in the World Bank Report on Quality of Higher Education;
- c) prominently reflected in the British Council Global Report on Social Enterprise and Higher Education
- d) extensively referenced
  - i. in the Best Practices Report of NITI Aayog
  - ii. in a case study published by UNESCO.
  - iii. In the excerpts of the Hon'ble PM's Task Force -
  - iv. In the Sub-group of Chief Ministers Report on Skill Development published by NITI Ayog and
  - v. In the high-power committee of UGC for 12(b) are provided below.

"The visiting team of NITI Aayog, had the opportunity to experience the University's eco-system of human values, aspiration and learning for school drop outs to master's level students by ensuring simultaneity in entirety entailing Education, Employability, Employment and Entrepreneurship (4Es). The lab-to-land approach with intensive and extensive industry partnership in action is a sustainable, scalable and replicable model.

"Centurion University of Technology and Management has been established with a noble cause of providing higher education facilities to weaker sections of the society in general and tribal in particular. ....UGC 12(b) recommendation is made keeping in view the uniqueness of the University and its mission to improve the delivery system through service initiatives, institutional and human resources and build partnerships to provide high quality, affordable, accountable, responsive and integrated service to the students, local communities and other stakeholders as one of the best center for higher learning particularly in the skill development through unique approach.

Exhibit 2: Pedagogical Approach & Framework

#### **STRATEGIC FRAMEWORK**

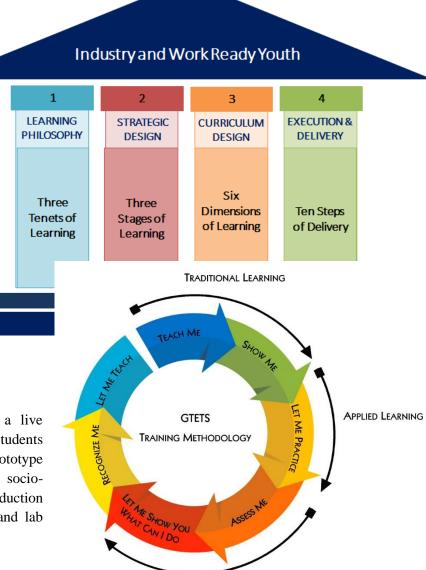
CUTM has iteratively and progressively institutionalized a unique model that focuses on producing industry & work ready youth irrespective of their educational background or qualifications. The strategic framework rests on four key pillars which ensure quality & excellence:

#### PILLAR 1: LEARNING PHILOSOPHY

The three tenets of learning:

- 1) Hands on knowledge & skills,
- 2) Practice Oriented Pedagogy
- 3) Experiential learning

CUTM's distinctiveness comes from recreating a live production environment in the campuses where students design, simulate test and manufacture a product (prototype to commercial scale) or service with a tangible socioeconomic value. This is achieved through live production facilities, strong industry linkages for workshop and lab



ACTION LEARNING

creation, curricula development and training of trainers which together creates an ecosystem for developing market relevant skills with exposure to the actual equipment/ tools/ processes and systems that the students would experience in the workplace. The University has market linked live and real-time production/ service delivery cum learning labs and facilities. These translate into a wide selection of over 80 skill based elective courses which give students an introduction to various skill domains in the initial years and they can choose a single domain specialization in the final year of studies.

### PILLAR 2: STRATEGIC PROGRAM DESIGN

Each program is broken into key components which follows the progression of learning across 3

**Exhibit 3:** Three Phases of Learning

**Phase I: Traditional Learning in the classroom:** Traditional learning methods building a foun course which involves domain specific knowledge, literacy, numeracy & technical skills.

Phase II: Applied Learning in the Lab: Developing hands on skills through practice in labs & workshops.

**Phase III: Action Learning in live production environment:** Demonstrate learning and independently practice the learning by producing a good or service of socio-economic value in a live production environment.

# SOME IMAGES FROM THE ACTION LEARNING LABS

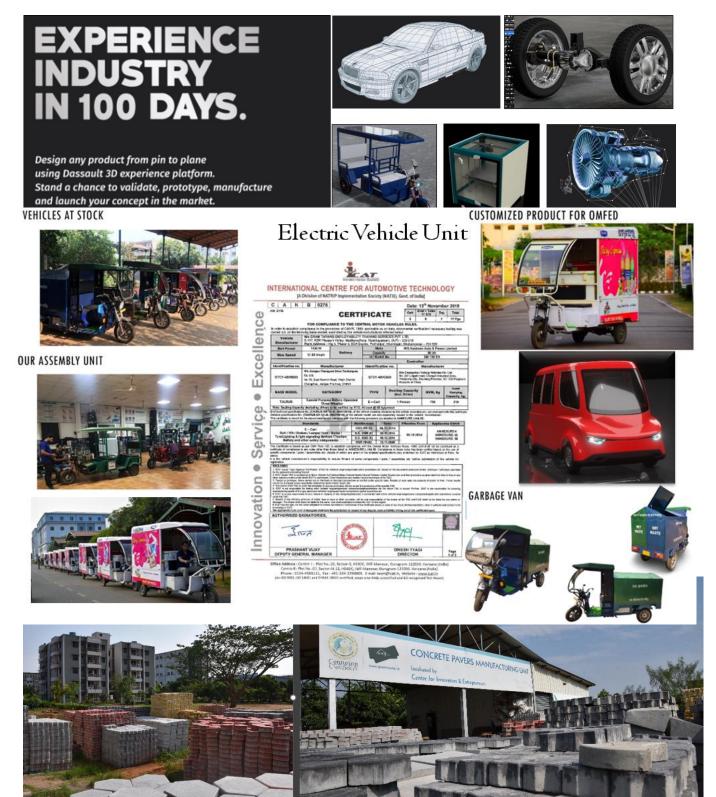




Exhibit 4: Snapshots of Centers of Excellence & Action Learning Labs for Precision Machining & Apparel & Textiles

# Advance Center of Excellence for Apparel & Textiles: Training & Production Center

Exhibit 5: Snapshots of Action Learning Labs for 3D Design, EVs, Civil Engineering



Concrete Pavers Unit: Action Learning Lab for Civil Engineering Dept.

#### **PILLAR 3: CURRICULUM DESIGN**

The University preempted the National Education Policy and has long devised a credit-based assessment and certification framework which is a unique differentiator in the education and skill development landscape. Curriculum for skill-based courses is aligned with NCVET QP/NOSs and content is developed in partnership with the industry. Courses consist of modules converging traditional, applied and action learning and developing competencies across six dimensions of skills:

- Literacy skills: capacity to read, understand and appreciate various forms of communication
- **Numeracy skills:** ability to use mathematical understanding and skills to solve problems and meet the demands of the job
- **Technical domain skills:** Domain specific technical knowledge & practical skills
- **Professional Skills:** Behavior & attitudes, Values & ethics, integrity, teamwork, communication, planning, time management & leadership etc.
- Life Skills: abilities for adaptive skills to deal with the challenges of work life & employment
- Entrepreneurial Skills: Design, Incubation, bank loan linkage and other skills needed to become nano/mini/micro entrepreneurs

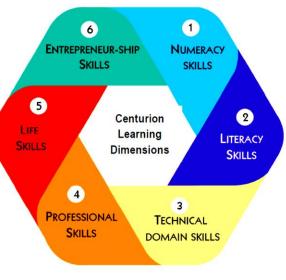
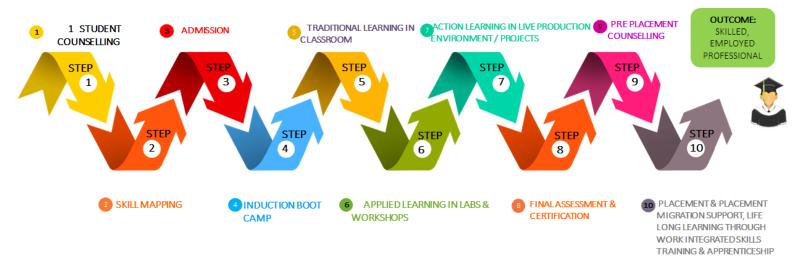


Exhibit 6: Six Dimensions of Learning

### PILLAR 4: TEN STEPS OF DELIVERY FOR QUALITY ASSURANCE

The final delivery of the skill courses is done through a 10 step process which ensures standardization, quality in delivery through execution excellence. Effective transition of trainees from centre to corporate is done through preplacement counselling. Work integrated learn & earn programs are offered to students. This also encourages retention in the workplace and multi skilling.



**Exhibit 7**: Quality Assurance through Ten steps of execution

## To summarize, CUTM's distinctiveness and strategic design is focused on:

- Deep industry engagement in the learning process of all education programs with setup of state-of-the-art, industry standard workshops, well equipped labs with relevant machines, tools and equipment and standard operating procedures, to ensure *hands- on, practice-oriented* and *experiential-based* learning.
- Giving the most disadvantaged sections of the society in difficult-to-work-in areas of the country a chance to earn a sustainable livelihood through hands on skilling, thereby driving equitable growth.
- Integrating skills into the curriculum of all education programs through skill elective courses and domain specializations which helps build career paths in the industry through domain expertise and the right mix of knowledge, skills & attitude.