



**PG DIPLOMA IN SERICULTURE**

**PROGRAMME OUTCOME**



**DEPARTMENT OF ZOOLOGY  
SERICULTURE UNIT**

**KAKATIYA UNIVERSITY  
VIDYARANYAPURI, WARANGAL – 506 009  
TELANGANA, INDIA**





## PREAMBLE

Sericulture industry is an agro based industry and labour-intensive in nature. It provides employment opportunities with low investment and helps for sustainable development in the rural areas. Particularly absorption of women force will be more in various activities pertaining to sericulture and ultimately show way to women economic empowerment. The significance of this industry with its rural based on-farm and off-farm activities has attracted the attention of the policy makers of the State and Central Government. Keeping these factors in to consideration, the department of sericulture, Kakatiya University has developed the course outcomes with strong objectives of scientific temperments.



## P.G.DIPLOMA IN SERICULTURE

### Programme Objectives:

The course is based on the following objectives:

- To develop an expertise to the students in managing their own sericulture farms efficiently.
- To impart the scientific knowledge about mulberry cultivation, silkworm rearing techniques among the students.
- To imbibe the lab to land concept and create awareness on soil to silk concept by emphasising on innovative technologies.
- To train students in quality silk production techniques.

### Programme Outcomes:

- On completion of the P.G Diploma in sericulture course students will be able to understand overall concept of sericulture namely mulberry, non mulberry silkworms their food plants, rearing techniques and post cocoon technologies.
- The course helps the students to acquire scientific knowledge regarding sericulture and its significance in contributing growth of our economy.
- Students will possess various skills to handle technologies involved in sericulture.
- Students may get enriched on advanced training methods in mulberry nursery management, silkworm rearing and reeling.
- There is a wide scope to achieve economically strong women entrepreneur as most of the activities in silkworm rearing needs female labour.
- Sericulture is the most potential sector in rural based Telangana state and trained students will become job providers rather than job seekers.

## **PG DIPLOMA IN SERICULTURE**

### **Department Vision**

- To provide quality education on sericulture to graduates of this region with integrating Research and Extension programmes.
- To produce competent students in sericulture who can establish themselves as job maker / providers rather than job seekers.
- To prominence the empowerment of rural women in sericulture activities.

### **Course Mission**

- To develop technically competent and professionally motivated manpower in sericulture to cater the needs of the Telangana State.
- To provide a common platform to address the problems and prospects of sericulture by organizing academic interactions such as seminars/ conferences/workshops/ field visits etc.

### **Programme Objectives:**

- To emphasize the importance of sericulture in improving the economic conditions of the rural people.
- To facilitate entrepreneurship development in sericulture.
- To highlight the modern methods of sericulture farming including product processing and value addition by organizing training programmes and field visits.
- To promote MoUS and collaborative research works with reputed universities / Institutions of India and abroad.

## COURSE OUTCOME

<b>Sl. No.</b>	<b>Course Name</b>	<b>Outcome</b>
1	Silk Industry An over view	<ul style="list-style-type: none"><li>➤ Provides knowledge about the importance of sericulture in the rural based economy like India.</li><li>➤ Gives an idea about the establishment of sericulture industry.</li><li>➤ Gives an idea about entrepreneurial opportunities in the sericulture industry starting from leaf to fabric production.</li><li>➤ Encourages the young talented students to take up entrepreneurship as a career (seri-business)</li><li>➤ Provides knowledge about sericulture as an activity which can be used for multiple purposes.</li></ul>
2.	Mulberry production	<ul style="list-style-type: none"><li>➤ To understand the scientific approach of mulberry.</li><li>➤ After studying the subject the student will learn/understand the distribution of mulberry varieties/species all over India &amp; globally.</li></ul>

<b>Sl. No.</b>	<b>Course Name</b>	<b>Outcome</b>
		<ul style="list-style-type: none"> <li>➤ Motivate students to plant high yielding mulberry varieties to increase leaf production through genetic improvement.</li> <li>➤ Helps in learning sexual / asexual propagation methods.</li> <li>➤ To learn different planting methods in both irrigated &amp; rainfed methods.</li> <li>➤ To understand the importance of chawkii garden for chawkii rearing centres.</li> <li>➤ To gain knowledge regarding pruning, nutrients, irrigation, usage of fertilizers and maintenance of farming and labour management.</li> <li>➤ To understand the scientific approach of mulberry.</li> </ul>
3.	Silkworm Biology & Physiology	<ul style="list-style-type: none"> <li>➤ Helps in understanding the classification and biology of silkworm.</li> <li>➤ Gives knowledge about the anatomy/ physiology of silk worm.</li> <li>➤ Study of silkworm hormones helps in understanding the endocrine glands regulation.</li> </ul>

<b>Sl. No.</b>	<b>Course Name</b>	<b>Outcome</b>
		<ul style="list-style-type: none"> <li>➤ Provides comprehensive knowledge about pure/hybrid races of silkworm.</li> <li>➤ To study the constituents of silk structure &amp; composition of silk proteins.</li> <li>➤ Helps in gaining critical understanding of factors that influence on silk production, so as to make sericulture sustainable.</li> </ul>
4.	Mulberry & Silkworm Crop Protection	<ul style="list-style-type: none"> <li>➤ To study the incidence, symptoms and damage caused by different pests &amp; diseases of mulberry &amp; silkworms.</li> <li>➤ To acquaint with the management of different pests and diseases through different approaches so as to prevent leaf/cocoon yield loss.</li> </ul>
5.	Value addition in Sericulture	<ul style="list-style-type: none"> <li>➤ Give an intensive idea to students about the usage of sericulture waste. Such as defective cocoons, surplus mulberry leaf, root and fruits etc.</li> <li>➤ With this knowledge they can transform sericulture to a value addition diversified functional industry.</li> </ul>



<b>Sl. No.</b>	<b>Course Name</b>	<b>Outcome</b>
6.	Silkworm rearing technology	<ul style="list-style-type: none"> <li>➤ To learn utilization, diversification &amp; value addition of sericulture resources in broadening the sustainability of sericulture industry.</li> <li>➤ To increase supply of disease free layings to the farmers. So, as to get good crops.</li> <li>➤ To study the effect &amp; regularization of environmental conditions for silkworm rearing.</li> <li>➤ To encourage scientific practices in rearing and harvesting of cocoons.</li> <li>➤ Helps to maintain hygienic conditions to increase cocoon quality.</li> <li>➤ To strengthen economical status in the state by encouraging value addition products by using modern techniques in rearing.</li> </ul>
7.	Silkworm seed production	<ul style="list-style-type: none"> <li>➤ Helps in understanding the development of sericulture for sustainable growth to generate gainful employment.</li> <li>➤ To improve quality &amp; quantity of production through induction of modern technology in sericulture.</li> </ul>

<b>Sl. No.</b>	<b>Course Name</b>	<b>Outcome</b>
		<ul style="list-style-type: none"> <li>➤ Explain the Management of manpower utilistion in egg production techniques.</li> <li>➤ Derives skills to produce silkworm eggs on sheet/in loose form.</li> <li>➤ Encourages private sectors to join with seed production technologies to enhance raw silk production target.</li> </ul>
8.	Post Cocoon technology	<ul style="list-style-type: none"> <li>➤ To understand characters and principles of cocoon assessments.</li> <li>➤ To know the importance of cocoon market and procedure for cocoon price fixation.</li> <li>➤ To learn about different methods of cocoon processing to reel out silk.</li> <li>➤ Provides assistance in establishing reeling units in the private sector.</li> <li>➤ Helps in understanding new post cocoon technologies so as to reduce labour usage and to improve silk quality.</li> </ul>
9.	Sericulture extension	<ul style="list-style-type: none"> <li>➤ To Nurture sericulture as sustainable and profitable vocation for all stakeholders with emphasis on rural employment and production of raw silk.</li> </ul>

<b>Sl. No.</b>	<b>Course Name</b>	<b>Outcome</b>
		<ul style="list-style-type: none"> <li>➤ To strengthen research, extension &amp; training programmes.</li> <li>➤ To improve quality seed production through mechanization and better technologies.</li> <li>➤ To assist reliable credit availability to all stakeholders.</li> <li>➤ To understand how to focus on women and youth training and to facilitate achievement of women to appropriate technologies by group activities.</li> </ul>
10.	Sericulture and Entrepreneurial Development	<ul style="list-style-type: none"> <li>➤ Helps in understanding the cluster development approach to make Sericulture sustainable.</li> <li>➤ Students can be able to learn that entrepreneurship is a fuel of economic progress and the prime mover of economic growth and development.</li> <li>➤ Make the student self reliable in establishing chawki rearing centres.</li> <li>➤ Chawki rearing of mulberry silkworm make them chief entrepreneur in the field of sericulture industry.</li> </ul>

<b>Sl. No.</b>	<b>Course Name</b>	<b>Outcome</b>
		<ul style="list-style-type: none"> <li>➤ Give knowledge about efficient management of human and natural resources to produce best cocoon crops throughout the year.</li> </ul>