

***POST GRADUATE CERTIFICATE IN
CLIMATE CHANGE AND SUSTAINABLE
DEVELOPMENT***

**SCHOOL OF AGRICULTURE
INDIRA GANDHI NATIONAL OPEN UNIVERSITY
MAIDAN GARHI, NEW DELHI – 110068, INDIA**

“Climate change is a risk-multiplier. It has the potential to take all the other critical issues we face as a global community and transform their severity into a cataclysm. Reducing poverty, increasing food production, combating terrorism and sustaining economic development are all vital priorities, but it is increasingly clear how rapid climate change will make them even more difficult to address. Furthermore, because climate change is intimately connected with our systemic, unsustainable consumption of natural resources, any decline in the ecological resilience of one resource base or ecosystem increases the fragility of the whole”

UN Climate Conference COP15, Copenhagen (December 2009)

About IGNOU

The Indira Gandhi National Open University (IGNOU) was established by an Act of Parliament in 1985, as a Central University, to broad-base the reach of education and provides cost-effective and quality learning facilities to large sections of our population, including those living in remote and far-flung areas. IGNOU has become the “The People’s University” in pursuit of its goal to democratize the higher education. Today, it serves the educational aspirations of about 3 million students. IGNOU imparts the study programmes through 21 Schools of Studies, with a network of 67 regional centers, 3380 learner support centers and around 67 overseas centers. The University offers need based academic programmes including professional, vocational and general awareness programmes to the seekers. Most of these programmes have been created to fulfill the learners’ need for:

- ◆ acquisition of academic and professional qualifications**
- ◆ continuing education and professional development at the work-place and**
- ◆ skill-enhancement.**

The methodology of instruction in the University is learner-centric. The teaching-learning process is through self-instructional learning materials, based on the credit system. The study material is enriched with audio/ video programmes and educational broadcast through Gyan Darshan and Gyan Vani. The self-study is also aided by the support facilities provided at learner support centers throughout the country. The Virtual Class, under the e-Gyankosh, provides an e-learning platform to deliver online programmes of the University. The online platform is a complete virtual learning environment suite covering all activities from registration to certification.

IGNOU offers more than 450 Certificate, Diploma, Degree and Doctoral programmes comprising around 2,200 courses. These are supported by faculty members and academic staff at the headquarters and Regional Centers. The academic counselors drawn from conventional institutions of higher learning, and

professionals from various organizations also give the necessary back-up. The teleconferencing sessions are available at the DTH platform and the interactivity has been ensured by providing regional centres and selected study centres (with high enrolment) with one-way video and two –way audio facility and link with the EduSat television based centers with interactive facility. The application of state-of-the-art ICTs has further helped in reaching out to the hitherto un-reached sections of the society. Access, quality and equity are IGNOU’s guiding principles. IGNOU is also actively involved in research, training, extension and capacity building activities. It uses innovative technologies and methodologies and fosters convergence of existing systems of massive human resource required for promoting integrated national development and global understanding. To know more about the University please visit the website at <http://www.ignou.ac.in>

Chair for Sustainable Development

With the declaration of 2005-2014 as the decade of education for Sustainable Development by the United Nations, Indira Gandhi National Open University (IGNOU) established in March 2007, a University level Chair, cutting across disciplines and schools, to develop and promote Education for Sustainable Development in India.

Eminent agricultural scientist Professor M.S. Swaminathan is the Honorary Chair for Sustainable Development at IGNOU. He is among the most distinguished and internationally acclaimed leaders in agriculture and sustainable rural development. His original concepts and operationalisation of Agenda 21 in the nature of ever-green revolution, bio villages and village knowledge centers for technological and knowledge empowerment respectively of the rural women and men, have set models not only for India, but for most of the developing countries.

Through the Honorary Chair, the IGNOU endeavors to enhance awareness among a wide spectrum of scientists, environmentalists, administrators, social scientists, policy makers and enlightened corporate sectors on the urgent and imperative need to put sustainability in the centre of all their endeavors. To know more about the Chair, please visit the website at www.ignouonline/save.

P G Certificate in Climate Change and Sustainable Development

The climate has always been changing since the earth was formed. Since the industrial revolution, a new era has arisen, the Anthropocene, in which human action have become the

main driver of global environmental change. Climate change is increasingly recognized as a critical challenge to ecological health, human well-being and future sustainable development. The developments in science and technology have enriched our understanding on climate change science and interaction between man and environment. The interaction between society and climate is among the important considerations pertinent to the quest of nations for sustainable development. In the backdrop of importance placed on creating awareness on climate change science and adaptation strategies by various ministries under the Government of India, the programme was tailor-made to incorporate the developments in the domain of climate change with respect to human influences on climate, the consequences of climate change, climate change conventions and protocols and adjustment possibilities. The learners would be enlightened with knowledge on the impact of climate change on terrestrial and aquatic ecosystems. The potential threats of climate change on sectors like agriculture, forest, fisheries, livestock and natural resources are detailed in the programme. The learners will be capacitated with the response options to the climate change like mitigation and adaptation strategies. For sustainable future, mitigation and adaptation measures are required to be mainstreamed into the national policies and programmes

Programme Objectives:

1. To provide knowledge to the participants on Climate Change Science and challenges to Sustainable Development.
2. To equip the learners with appropriate tools and techniques for interpreting the impacts of climate change, and evaluating & implementing measures that reduce vulnerability of systems.
3. To empower the learners with the mitigation and adaptation strategies against climate change.

Programme structure

Course Code	Course Title	Credits
MSD-001	Introduction to Climate Change and Sustainable Development	04
MSD-002	Potential threats of Climate Change	04
MSD-003	Response options: Mitigation and Adaptation	04
MSDP-004	Case Studies/Project Work	04

Eligibility Criteria

Graduates from any discipline are eligible.

Medium of Instruction English

Target Group

- Scientists and educational functionaries
- Agricultural graduates and science graduates
- School and College level Teachers
- NGO’s professional, Environmental Executives, Policy makers, Journalists

Programme Duration

The minimum duration of the programme is 6 months. However, the students are given a maximum period of two years to complete the programme from the date of registration.

Programme Fee

The fee for the Programme is Rs. 2500. Facility for online payment is available through the payment gateway (Axis Bank & Credit Card) being offered by the University for online programmes. Student can also pay through Demand Draft (in favour of IGNOU, NewDelhi).

Online Platform

The Programme shall be available online on the SAVE (Sustainable Action and Virtual Education) Platform. It is a complete virtual learning environment covering all the activities from registration to certification. The following features shall be available to the registered students.

- 1. Admission:** There shall be two sessions in an academic year i.e. January and July sessions. Registration form shall be specially devised with the facility of uploading scanned certificates, other required documents and photograph. Registration will be confirmed only after verification of the certificates and payment of the required admission fee. Facility for online payment shall be available through the payment gateway (AXIS Bank) being offered by the University for online programme.
- 2. Integrated multimedia courseware:** Once registered, learners will have access to personalized learning space (My Page). This includes self instructional material, related audio/video, slides, self check exercises, etc. dovetailed in one platform.
- 3. Online Counselling:** Web cast based counselling integrated with text based chatting facility shall be used for counselling purposes. **There shall be around 10-12 counselling sessions of 1-2 hours duration each.**
- 4. Learner support:** Asynchronous and synchronous modes of interaction will be used to provide just in time support to learners.
- 5. Online Project Platform:** Templates shall be made available for synopsis submission, project uploading and evaluation.
- 6. Online Term End Examination:** Online examination will be conducted in specified centres.

Project Work

- The project work will aid the learners to understand better the science of climate change.
- The learner in their project work may collate the information reading climate change and present their work in the form of project.
- The project work can be climate change impact assessment on the ecosystem.

- The project work may also help the learners to document adjustment possibilities that have absence in his region. This indeed will help the learners to understand the science behind adaptation and mitigation strategies. The learners can be innovative and develop an action plan for a village /region so as to reduce the vulnerability.
- The learners can communicate their idea with the programme co-ordinator and certainly the learners will benefit from the interaction and get all possible counsel for undertaking a project work

Evaluation

A three-tier system of evaluation is followed (a) self-evaluation through evaluation tools structured within the course, (b) continuous evaluation through assignment and (c) through term end-examination. The weightage to the term end examination for the theory courses shall be 70% and the weightage to continuous assessment shall be 30%. The project work/dissertation shall also be evaluated as per the university norms.

Opportunities

Global climate change is one of the greatest challenges to humanity. The solution to systemic change hinges on in depth understanding of climate change science and development of adjustment possibilities. This programme aims to address, these issues and the learners would be having holistic view about climate change and related issues. Career opportunities in this wide and growing field are numerous: in industry, academics, consultancies and environmental agencies.

For further information contact:

The Programme Coordinator

Post Graduate Certificate in Climate Change and Sustainable Development

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