

STUDENT HANDBOOK

**Post Graduate Certificate in Inventory Planning and Warehousing
System for Engineers
(PGCIPWS)**



**School of Engineering and Technology
INDIRA GANDHI NATIONAL OPEN UNIVERSITY
Maidan Garhi, New Delhi – 110068**

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Further information on the Indira Gandhi National Open University courses may be obtained from the University's office at Maidan Garhi, New Delhi-110 068.

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CONTENTS

1. The University	4
2. School of Engineering & Technology	5
3. Post Graduate Certificate in Inventory Planning & Warehousing Systems For Engineers	5
4. Programme Delivery	8
5. Student Support Services	9
6. Instructional System	9
7. Term End Examination	11
8. Evaluation Methodology	12
9. Other Important Information	13
10. Contact Persons	13

RECOGNITION

IGNOU is a Central University established by an Act of Parliament in 1985 (Act No. 50 of 1985). The Degrees/Diplomas/Certificates awarded by IGNOU are recognized by all the members of the Association of Indian Universities (AIU) and to be treated at par with Degrees/Diplomas/Certificates of all Indian Universities/Deemed Universities/Institutions vide UGC Circular No. F. 1-8/92 (CPP) dated February 1992 and AIU Circular No. EV/B(449)/94/176915-177115 dated January 14,1994.

1. THE UNIVERSITY

Indira Gandhi National Open University (IGNOU) was established in 1985 by an Act of Parliament to achieve the following objectives:

- Democratizing higher education by taking education to the doorsteps of the students
- Providing access to high quality education to all those who seek it, irrespective of age, region, or formal qualifications
- Offering need-based academic programmes by giving professional and vocational orientation to the courses
- Promoting and developing distance education in India
- Setting and maintaining standards in distance education in the country — as an apex body for the purpose.

Objectives of the University

The University has the following major objectives:

- Promoting the educational well-being of the community;
- Democratizing higher education by providing easy access to all those who desire to improve their qualifications, skills and competence by taking education to the doorsteps of people living even in remote areas;
- Offering need-based innovative academic programmes by giving professional and vocational orientation to the course curriculum;
- Disseminating learning and knowledge through an innovative multiple media teaching-learning system.

IGNOU has now emerged as the largest University in the world. It is mandated to cover large segments of population across the length and breadth of the country particularly the disadvantaged groups of society engaged in various vocations and professions.

The University follows a learner-centric approach. It has successfully adopted a policy of openness and flexibility in terms of relaxed entry qualifications and provision for multiple entry and exit, pace, place of study, etc. At present, IGNOU is offering more than 200 programmes and has over 2 million students on its roll. The University operates through a strong network of Regional Centers and Study Centers/Programme Study Centers across the country, which provides individualized support to the learners. Most of these centres are equipped with the state-of-the-art tele-conferencing facility. The University produces high quality and rich content courseware for its learners for which the IGNOU was conferred an Award of Excellence for Distance Education Materials by the Commonwealth of Learning (COL), Canada.

Academic Programmes

The University offers short term non-credit programmes as well as wide range of programmes leading to Certificate, Diploma or Degree, covering conventional as well as innovative programmes. Most of these programmes have been developed after an initial survey of the demand for such studies. They are launched with a view to fulfill the student's needs for

- Certification
- Improvement of skills
- Acquisition of professional qualifications
- Continuing education and professional development at workplace
- Self-enrichment
- Diversification of knowledge, etc.

2. SCHOOL OF ENGINEERING AND TECHNOLOGY (SOET)

The School of Engineering and Technology has the responsibility of initiating academic, continuing and extension education programmes in the areas of engineering and technology. The School has developed several programmes aimed at increasing job potential and economic advantage to the learners. To fulfill its mandate, the School regularly interacts with employing agencies, professional bodies and industry so as to reflect educational and training needs of the targeted learner group in the curriculum. The school practices participative and collaborative strategy by inviting different industries.

The instructional packages are designed and developed with the help of experts drawn from various institutions like IITs, National Institutes of Technology (NITs), reputed Universities and Engineering Colleges and Industry. The School has forged alliances with the Construction Industry Development Council (CIDC), Directorate General of Shipping (DGS), Khadi and Village Industries Commission (KVIC), Footwear Design and Development Institute (FDDI), Ministry of Power (MoP), and Hero Moto Corp Ltd. (HMCL), etc. to design, develop and conduct tailor-made courses to meet the specific needs of respective employment sectors.

3. POST GRADUATE CERTIFICATE IN INVENTORY PLANNING AND WAREHOUSING SYSTEM FOR ENGINEERS

SOET offers Post Graduate Certificate in Inventory Planning and Warehousing Systems for Engineers (PGCIPWS) with the following broad objectives:

- The Post Graduate Certificate in Inventory Planning and Warehousing Systems for Engineers (PGCIPWS) Programme aims to develop skilled human resources in the field of inventory planning and warehousing at the local, regional and national levels.
- It seeks to build competencies and professional skills among learners to avail employment opportunities in various industrial sectors.
- It aims to upgrade the knowledge and skills of those working in industry without a formal training.
- The programme also caters to the academic needs of those aspiring for higher learning.

Credit System

The University follows the ‘Credit System’ for most of its programmes. Each credit amounts to 30 hours of learner study comprising all learning and assessment activities, such as: reading and comprehending the print material, listening to audio, watching video, attending counseling sessions, practical sessions, teleconferencing, writing assignment responses, refereeing books in library, discussions with peer group etc. Completion of these academic programmes requires successful clearing of the assignments, Term-end examination of each course, project work and field training, where ever applicable.

Details of the Programme

Some pertinent details of the programme are given below:

Programme Duration	6 Months (Minimum) and 2 Years (Maximum)
Programme Fee	6,000/- (including Registration Fee) (Please check the recent update at www.ignou.ac.in)
Eligibility	Graduate in Engineering.
Age	No bar
Medium of Instruction	English

Programme Structure of PGICIPWS

There are four courses in the programme. The total credits of a course have been worked out on the basis of course content and their weightages. Table 1 gives the details of the Programme structure of PGICIPWS.

Table 1 Programme Structure of the PGICIPWS

Sl. No.	Course Code	Title of the Course	Type of Course Compulsory/ optional	Credits
1	MWR- 01	Introduction to Inventory Planning and Control	Compulsory	4
2	MWR- 02	Advance Inventory Planning and Control	Compulsory	4
3	MWR- 03	Warehousing System	Compulsory	4
4	MWRP-01	Project	Compulsory	4

The details of course structure of “**Post Graduate Certificate in Inventory Planning and Warehousing System for Engineers (PGCIPWS)**” is given below:

Course Code: MWR- 01

Credits: 4

COURSE TITLE: INTRODUCTION TO INVENTORY PLANNING AND CONTROL

Block 1: Basic Concept of Inventory

Unit 1: Introduction to Inventory Planning and Control

Unit 2: Importance and scope of Inventory Planning and Control

Unit 3: Inventory Classification

Unit 4: Issues and Challenges of Inventory Management

Block 2: Inventory Models

Unit 5: Inventory Control Techniques

Unit 6: Inventory Cost- Concept of Economic Order Quantity (EOQ)

Unit 7: Deterministic Inventory Models

Unit 8: Price Discounts and Multi Items Inventory

Block 3: Demand Planning and Forecasting

Unit 9: Demand Planning

Unit 10: Demand based Inventory Models

Unit 11: Demand Forecasting Techniques

Unit 12: Perpetual Inventory Models-Maintaining Inventory Levels

Block 4: Inventory Practice & Evaluation

Unit 13: Inventory Purchase Procedures & Practices

Unit 14: Inventory Storage Procedures & Practices

Unit 15: Inventory Management System (IMS) and Performance Monitoring & Evaluation

Unit 16: Inventory Stock Verification & Audit.

Course Code: MWR- 02

Credits: 4

COURSE TITLE: ADVANCE INVENTORY PLANNING AND CONTROL

Block 1: Material Planning

Unit 1: Materials Management – An Overview

Unit 2: Issues and Challenges of Materials Management

Unit 3: Material Requirement Planning (MRP)

Unit 4: Manufacturing Resource Planning (MRP II)

Block 2: Advanced Material Planning

Unit 5: Strategic Materials Management

Unit 6: Master Production Schedule

Unit 7: Aggregate Planning

Unit 8: Just In Time (JIT) Inventory

Block 3: Supply Chain Management and ERP

Unit 9: Supply Chain Management –

Unit 10: Supply Chain Logistics

Unit 11: Vendor Management

Unit 12: Enterprise Resource Planning

Block 4: Modern Concepts: Materials Management Perspective

Unit 13: Value Management

Unit 14: Waste Management- MUDA

Unit 15: KAIZEN – Change Better (The Continuous Improvement)

Unit 16: KAN-BAN Inventory Management System

Course Code: MWR- 03

Credits: 4

COURSE TITLE: WAREHOUSING SYSTEM

Block 1: Warehousing System Design and Operations

- Unit 1: Introduction to Warehousing
- Unit 2 Warehouse management procedures
- Unit 3 Role and responsibilities of warehouse manager
- Unit 4 Warehouse record management

Block 2: Warehouse Location and Costing

- Unit 5 Warehouse location study
- Unit 6 Warehouse facility planning
- Unit 7 Warehouse layout planning
- Unit 8 Warehouse costing

Block 3: ICT in Warehousing System

- Unit 9 ICT in warehousing system
- Unit 10: Warehouse Distribution System
- Unit 11: Optimization of Warehouse Distribution
- Unit 12: Allocation Models for Warehousing

Block 4: Safety and Security of Warehousing System

- Unit 13: Safety, Security and Loss Prevention in Warehouse
- Unit 14: Stock Verification, Valuation and Auditing
- Unit 15: Legal Issues in Warehouse
- Unit 16: Obsolescence and Waste Disposal Management

COURSE TITLE: PROJECT COURSE CODE: MWRP 01

As assigned by the course coordinator to carry out a project related to Inventory Planning and Warehousing System. The project will continue throughout the complete semester.

4. PROGRAMME DELIVERY

The programme delivery mechanism for the Post Graduate Certificate in Inventory Planning and Warehousing System for Engineers (PGCIPWS) shall be as follows:

- The programme will be delivered through headquarter.
- The admitted students will get the academic support through online platform.
- There will be one assignment for each course MWR-01, MWR-02, and MWR-03.
- For the course MWRP-01, each student will complete the project as per the guidelines given in Project workbook.

4. STUDENT SUPPORT SERVICES

You will get all necessary support from headquarter. Some of the academic as well as administrative supports are listed below:

- a. Information, Counseling and advice on your programme as well as other academic programmes offered by the University. For this programme, there will not be any study centre and there will not be any counseling session.
- b. Pre-admission, during admission and post-admission counseling.
- c. Induction for newly enrolled students.
- d. Supply of assignment and project schedules.
- e. Provide Library facilities at IGNOU Head Quarter.
- f. Receipt and evaluate assignment responses submitted by you and return of the same with marks and feedback on assignments you would be writing.
- g. Attend to academic and administrative queries pertaining to registration, examination, assessment, feedback etc.

5. INSTRUCTIONAL SYSTEM

The Open University system is more learner-oriented and the learner is an active participant in the pedagogical (teaching and learning) process. Most of the instructions are imparted through distance education methodology.

Study Material: Soft copy of the study material of the programme will be supplied to the learners.

Academic Support/Counseling: Academic Support/Counseling may be provided through online. The coordinator of the programme will work out the schedule of these support sessions taking into consideration various aspects including the project work and term end examination periods, which you are required to undertake compulsorily. Please note IGNOU is not allocating any study centre for this programme.

Assignments: Assignments constitute an essential component of the instructional system. You are required to write responses for these assignments based on your understanding of courses, discussions and interactions you will have with counselors and fellow learners. You are required to submit hand written assignment responses of every course through email pgcipws.assignment@ignou.ac.in. Every assignment mark will be counted for the final marking for each course.

The purpose of introducing an assignment system and giving assignments a weight age of 30 per cent per course is intended to test your capacity and capability of your technical and practical experiences. Therefore, you must devote enough time for preparing and writing assignment responses as per the guidelines of the university and submit them to the study centre. Please make sure that you must write assignment responses on your own which will improve your understanding, knowledge and skills about the course curriculum. At the same time, you are also advised not to get tempted to reproduce the course material given in the units or assignments responses of others. Any learners, which may indulge into such practices, may lose their valuable time in acquiring knowledge and skills in the subject. Further if you are produced the textual material from the course materials provided or any other source; you may be penalized by awarding “Zero marks”.

While preparing assignment responses you must keep the following points in mind, which may help you for preparing better assignment responses:

- a. Read assignment question carefully and identify various sources of material.
- b. Make your answer precise, concise and systematic, which is relevant to assessment question.
- c. Supplement your response with examples, illustrations and real life situations with activities which will help you acquiring better knowledge and skills.
- d. Stick to the word limit if indicated in the assignment, by drafting, re-drafting assignment responses till you arrive to a final draft response.
- e. Write answer in your own handwriting, and don't send typed assignments.

Instruction for sending assignment response

While sending the assignment responses the following points should be particularly taken care:

- f. Send assignment responses complete in all respect. Partial or incomplete assignment will not carry any credit
- g. Use A-4 size paper for writing your responses and leave a margin of about 2 ½ on the left side for writing tutor comments and providing feedback
- h. Always retain a copy of the assignment response with you as a precautionary measure.
- i. The assignment should be submitted to the coordinator of the study centre on or before the last date indicated in the operation schedule given by the university
- j. Procure a set of new assignment question of an assignment falls on a holiday, the same may be submitted on the next working day.
- k. Write your enrolment number, name and full address at the right-hand corner of the 1st page of your assignment response.
- l. Send your assignment responses through email pgcipws.assignment@ignou.ac.in, please do not submit/forward your assignment to any centre/institution.

The course for which the assignment has been done, its Course Code No. and Assignment Code should be written in capital letters in the centre of the top of the 1st page of the response sheets. The top left hand corner should be kept for office use. The top of the 1st page of your response(s) should look something like this:

Course Title	_____
Course Code	_____
Assignment code	_____
Enrolment No	_____
Name	_____
Address	_____
Telephone	_____
E-Mail	_____
Date of Submission	_____

Once you get the pass marks in an assignment, you cannot resubmit assignment responses, if any, for improvement of grade/mark. Assignment is not subject to re-evaluation except factual errors, if any.

Assignments are to be sent to head quarter at the address of Programme Coordinator.

Project Work: You have to complete a project of your choice as per the guidelines given in Project Workbook.

6. TERM ENDEXAMINATION

Term End Examination (TEE) is another evaluation tool in the PGCIWPS programme. The university conducts Term-end examination twice a year in the month of June and December. Students are permitted to appear in term-end examination subject to the validity of registration for the courses, in which they wish to appear. They have also to submit the required number of assignment (s) if any, in those courses by the due date. Prescribed Fee has to be paid to appear Term end Examination. Students can also submit On-line examination form as per the guidelines through IGNOU website at www.ignou.ac.in.

In order to appear in the Term-end-Examinations, the students are required to fill in the Term End Examination form. The Examination Form is to be submitted online through IGNOU Website www.ignou.ac.in along with an examination fee of Rs. 200/- per course (Please check the recent update at www.ignou.ac.in). The written examination will be held for MWR-01, MWR-02, and MWR- 03 only. For MWRP- 01, there will be project evaluation. Please see schedule for submission of examination forms through online portal for each session, which is available at IGNOU website.

After receiving the examination form, the University will upload Hall Ticket at IGNOU website. In case if student not getting Hall Ticket, student is advised to contact at SED Head Quarter. Your enrolment number is your Roll Number for examination. You should be careful in writing Roll Number. Any mistake in writing the roll number will result in non-declaration of your result. Final term end examination will be conducted at selected IGNOU examination centres.

To be eligible to appear at the term end examination in any course, you are required to fulfill the following conditions:

- a. You should have submitted the assignment responses for the respective courses.
- b. You should have submitted the Examination Form in time in which you would like to write examination.
- c. You should have valid registration at the time of submission of Examination form.
- d. You should complete a minimum duration of the programme.

Examination date sheet and schedule which indicates the date and time of examination for each course is sent to all the Study Centers in advance. The same is also notified through **IGNOU Website** from time to time.

It is essential pre-requisite for you to submit the examination form for taking examination in any course. You can obtain the form from your study center. Only one form is submitted for all the courses in one-term examination. You are required to pay a fee of Rs. 200/- for each course as examination fee (Exam Fee may vary from time to time. Please visit www.ignou.ac.in for details). You must submit TEE form online at www.ignou.ac.in.

7. EVALUATION METHODOLOGY

The system of evaluation in IGNOU is also different from that of the conventional universities. IGNOU has a multi-tier system of evaluation.

- a. Continuous evaluation mainly through assignments which are tutor marked assignments.
- b. The Term End Examinations.
- c. Projects

The evaluation of learners depends upon various instructional activities undertaken by them. A learner has to write assignment responses compulsorily before taking term end examination from time to time to complete an academic programme. Term-end examination will be conducted at the study centre/exam centers, whereas the project submission will be done at the study centre.

The weightage of TMA (Tutor Mark Assignments) and TEE for all the courses is 30% and 70% respectively in the overall evaluation scheme of the programme.

A student will be awarded marks for the TMAs and for Term End Examination (TEE) part for each course. To clear a course, a student will have to clear both the segments of the course. Following table gives minimum percentage of marks required for the clearance of a course:

Evaluation Component's part for the Course	% of marks for Clearance
TMA	≥35%
Term-end Examination (TEE)	≥35%
Overall Performance	≥40%

To facilitate statement of overall performance at the end of the programme, the calculation of overall percentage will be based on the weighted average system and the precision will be up to the one point after the decimal. Calculations will be carried out using the following scheme:

$$\text{Overall Percentage} = \frac{C_1P_1 + C_2P_2 + C_3P_3 + \dots}{C_1 + C_2 + C_3 + \dots} \times 100$$

where $C_1, C_2 \dots$ denote credits associated with courses taken by the student, and $P_1, P_2 \dots$ denote the percentage of marks awarded in respective courses.

Depending on the overall percentage of the marks secured by a candidate the division will awarded as follows

- **1st Division (With Distinction) - 75% and above**
- **1st Division - 60% and above but less than 75.0%**
- **2nd division - 50% and above but less than 60.0%**
- **Pass - 40% and above but less than 50.0%**
- **Unsuccessful - Below 40%**

8. OTHER IMPORTANT INFORMATION

Admission Schedule

The University offers online **admission** for PGCIPWS programme. The application forms are accepted in January and July sessions throughout the year. Once the application form is received, you will be sent the intimation letter confirming your admission from following January or July session if the application form is received on or before November 30 and April 30 respectively.

9. Programme Fee

The programme fee of PGCIPWS is Rs.6,000/- (Please check the recent update at www.ignou.ac.in). The fee is to be paid online or in the form of a Demand Draft (DD) drawn in favor of IGNOU payable at New Delhi along with the application for admission and I-card.

10. CONTACT PERSONS

For any clarification and help, you may contact the Programme Coordinator at the following addresses:

Prof. Ashish Agarwal
Programme Coordinator
PGIPWS

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