

SELF ASSESSMENT REPORT

DEPARTMENT OF JEWELLERY DESIGN AND
GEMOLOGICAL SCIENCES



PAKISTAN
INSTITUTE OF
FASHION AND
DESIGN

LAHORE - PAKISTAN

Chartered by the Government of Pakistan

PAKISTAN INSTITUTE OF FASHION AND DESIGN, LAHORE

Department of Gems & Jewellery Design

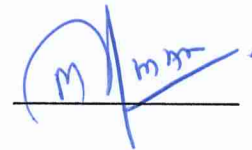
Self-Assessment Report (SAR)

B. Des. - Jewellery Design and Gemological Sciences

Course Coordinator / Head of Department:

Mr. Muhammad Umar

Signature



Program Team Members

1. Ms. Amina Rizwan

2. Mr. Ali Raza





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INTRODUCTION TO PIFD

Pakistan Institute of Fashion and Design (PIFD), Lahore, Pakistan is a Federally Chartered Public Sector degree awarding institute offering globally competitive and comprehensive design education in the field of design. Established in 1994 as Pakistan School of Fashion Design, it has expanded from Department of Fashion Design to seven, full-fledged Undergraduate degree programs. Since then its mission continues to expand and grow, in terms of affiliations and partnerships with industries, international higher education affiliates and associations, the most recent being CUMULUS, a global association for art and design educational research. PIFD comprises of the following Departments:

- **SCHOOL OF FASHION DESIGN**
Department of Fashion Design
- **SCHOOL OF FASHION MARKETING AND PROMOTION**
Department of Fashion Marketing and Merchandising
- **SCHOOL OF TEXTILE DESIGN**
Department of Textile Design
- **SCHOOL OF ACCESSORIES AND PRODUCTS**
Department of Jewellery Design and Gemological Sciences
Department of Furniture Design and Manufacture
Department of Leather Accessories and Footwear
Department of Ceramics and Glass Design

VISION

- PIFD aims to be a specialist design institute, catering to the demands of the industry.
- Its goal is to provide a comprehensive design education which focuses on the relationship between the designed product and the consumer.
- It aims to be a platform from which individuals can pursue challenging career options in the field of design.

MISSION

PIFD seeks to produce graduates who are able to combine design capability with manufacturing dexterity to create products that are functional and aesthetically beautiful as well as giving students the necessary management and marketing tools in order to promote these products in markets around the world. PIFD endeavors to create new generation of designers, entrepreneurs and highly skilled youth to cope with the demands of the new millennium.

Introduction to Department of Jewellery Design and Gemological Sciences

The four years program of Jewellery Design and Gemological Sciences, established in 2008, focuses on exploration around object and function within its historical, social, cultural, and emotional significance. Faculty work in close proximity with students to impart knowledge,

technical skills and critical thinking to develop innovative products and artifacts within traditional and contemporary parameters.

The progressive levels of both design and technical complexities are addressed through challenging assignments to hone students' critical thinking and design solutions. Through design research, product developments, production, CAD/CAM and comprehensive understanding of gemology, students are asked to challenge conventional ideas pertaining to themes, materials and markets and exposed to more critical ways of understanding body ornamentation.

Mission of the Department

Jewelry students graduate with strong personal vision and a solid foundation on which to form their career, spanning the gamut from designers, entrepreneurs to educators, teachers and design consultants who are well versed with trends, skills, aesthetics and technology. It strives to educate students to move hand in hand with industry while developing their own personal vision and collections.

Other aims and objectives of the department are:

- To develop interpersonal skills in graduates;
- To encourage team working;
- To develop abilities to effectively explore, investigate and organize work;
- To develop ability to practically apply the theories learnt in the courses;
- To aid students in understanding of jewellery trade and business dynamics;
- To provide opportunities to the faculty to learn and enhance their knowledge through various training programs.

Teaching Methodology

The department gives its faculty members the liberty to devise their own teaching methodology which is a mix of lectures, assignments, tutorials, group discussions, quizzes, presentations and hands on studio techniques. Industry visits, market visits and foreign visits are also arranged for the students so that students can learn the application of the concepts which they have acquired in various courses. Moreover, project work is also assigned to students by the teachers so that they can apply the knowledge and concepts they have learnt in their respective courses.

Criterion 1: Program Mission, Objectives and Outcomes

Quality Policy of Department of Gems & Jewellery Design

Following are the learning objectives:

1. To produce graduates who have in-depth knowledge from designing to manufacturing of wearable jewellery and identification of gemstones.

2. To enable students to develop strong critical, analytical and logical thinking.
3. To teach students the practical application of the various concepts they have learnt in their four year degree program.

Mission Statement of Program

The four years program in Jewellery Design and Gemological Sciences aims to impart skills and knowledge in basic and advance jewelry design and production, while fostering individual experimentation pertaining to historical traditions and techniques. The rigorous, well rounded curriculum equips students in techniques, aesthetics as well as conceptual aspects of jewellery, which informs contemporary discourse within the field. The program also aims to give knowledge of the field of colored gems and their identification. Students graduate with informed awareness and critical understanding of jewelry, objects and their function, taking diverse career paths such as studio jewelers, in house designers, technicians, CAD/CAM specialist and teaching.

Standard 1.1: The program must have documented measurable objectives that support Faculty/Institution mission statements.

Name of Program	Duration	No. of Modules	Total Credit Hours
Bachelor of Design in Jewellery Design and Gemological Sciences	4-Year Degree Program	8 Semesters (Course work + Thesis)	131

1.1: PROGRAM'S OBJECTIVES

1.1.1 Bachelor of Design (B. Des.) in Jewellery Design and Gemological Sciences (4-Year Degree Program)

Curriculum for the degree consists of HEC approved courses. First year is the foundation year in which the students are taught the basic, foundation and compulsory courses. The courses include: Design History and Theory, History of Art and Culture, Basic Drawing, Shaping of 2D Design, Digital communication, English, Pakistan Studies/Islamiyat and Material and Models/Mathematics and Geometry. In the remaining three years the students study the courses related to Gems and Jewellery Design. By the end of the final year they are required to submit a thesis / professional project consisting of at least seven wearable jewellery pieces.

B. Des. in Jewellery Design and Gemological Sciences Program Objectives:

The aims and objectives of the program are as follows:

1. To aid students in understanding of jewelry industry and dynamics within local and international market;
2. To provide the industry with professionals who have thorough knowledge of Gems and Jewelry designing;
3. To develop ability to apply the practical and theoretical knowledge learnt in the courses;
4. To develop abilities to effectively explore, investigate and organize data; and
5. To develop interpersonal skills in graduates and to encourage team working.

6. **Strategies are based on:**

- Designing the program as per the curriculum being followed by other institutes offering a similar degree/program.
- Providing all resources including gemology lab, handcraft studios, lecture halls, multimedia and computer labs.
- Regular check and revision of the curriculum to bring continuous improvement.
- Establish ties with the industry personnel and potential employers.
- Updating the knowledge of faculty by sending them to various training programs and seminars.

1.1.1 **Assessment of Educational Objectives:**

The educational objectives of each program are regularly assessed as indicated by the table below:

Table 1: B. Des. Program Objectives Assessment

OBJECTIVES (1)	HOW MEASURED (2)	WHEN MEASURED (Frequency) (3)	IMPROVEMENT IDENTIFIED (4)	IMPROVEMENT MADE (5)
As given in Para 1.1.1.1	1. Regular Assessment of student knowledge and ability to exhibit the skill by the teacher: i. Class tests ii. Assignments	Regular At least once a week One in every class	1. Student regularity should be emphasized 2. Writing skills of the students should be improved.	1. Attendance rule applied more seriously. 2. Students encouraged to improve their writing skills by introduction of more English courses. 3. Course/Curriculum revised more frequently.

iii. Mid Term Exams	Once in every semester	3. Course curriculum should be updated frequently. 4. Communication skills of the students should be improved.	4. More frequent research into improvising/upgrading assignments for each course, maintaining digital archives of assignments/resources, to increase knowledge pertaining to industry, courses. 5. Holding local and international workshops/visits for students
iv. Class Presentations	Once in every semester		
v. Final Examination	Once in every semester		
vi. Term Projects	Once in every semester		
vii. Discussions	In every class		

2. Surveys

i. Faculty Evaluation	Once in a semester Conducted in 2021		The Course Coordinator/Head of Department and Faculty are informed about performance for improvement
ii. Student Course Evaluation	Once in a semester Conducted in 2021		The Course Coordinators/ Head of Departments are informed for improvement
iii. Survey of Graduating Students	Once in a year		
iv. Faculty Course Review Report	Once in a year		
v. Faculty Survey	Once in a year		
vi. Faculty Resume	Once in a year		

vii. Alumni Survey	Once in a year		
viii. Employer's Survey	Once in a year		

Standard 1.2: The program must have documented outcomes for graduating students. It must be demonstrated that the outcomes support the program objectives and that graduating students are capable of performing these outcomes.

1.2.1 Bachelor of Design Jewellery Design and Gemological Sciences Program's Outcomes:

Following are the expected outcomes:

1. The program will produce graduates with convincing capabilities.
2. The program will facilitate the industry and jewellery sector by providing graduates who have knowledge related to Gems and Jewellery Design and entrepreneurship.
3. The program will establish foundation for further learning and education.

Table 2 shows the Outcomes that are aligned with each Objective

Table 2: B. Des. Program Outcomes vs. Objectives

Program Objectives	Program Outcomes		
	1	2	3
1	X	X	X
2	X	X	
3	X	X	
4	X	X	
5	X		

Standard 1.3: The results of program's assessment and the extent to which they are used to improve the program must be documented.

1.3.1 a. Actions taken on the basis of assessment:

1. Syllabus/Curriculum revision:

Courses and credit hours were revised according to the scheme of studies according to the requirement of time table.

2. Teachers training and Faculty development:

Since the inception of department, the faculty of Gems & Jewelry department have taken significant steps to be an integral part of both local and international jewelry spheres as well as cross-disciplinary collaborations.

Between March 2017 & 2020, faculty and students have been part of annual global contemporary jewelry week (Schmuck) held in Munich, Germany, which concludes with workshops in jewelry business management and contemporary materials with international artists.

Lab supervisor Sir Aleem was sent to PGJDC for training of engraving and stone setting on Graver Max. Lab supervisor Sir Humayun and Amina Rizwan, Assistant Professor, were also sent on gemstone cutting & faceting course to Sri Lanka. Furthermore, faculty will also be referred for further studies to international universities in Europe and USA.

From March 2022, three faculty members from the department, Amina Rizwan, Shuja ur Rehman, and Qurat ul Ain Ali have been part of Research pursuits workshop led by Dr. Shabnam. Furthermore, faculty are also encouraged for further studies to international universities as well as have begun partaking in conferences and paper publications.

1.3.1 b. Strengths of Department:

1. Teamwork;
2. Work environment;
3. Effective coordination between the faculty, staff and course coordinator.
4. Strong developments in previously untapped frameworks within department such as jewelry research (international publications/further education), artists' talks/workshops, lapidary & CAD/CAM.
5. Digitalization of courses in reference of online teaching during COVID.

1.3.1 c. Weaknesses of Department:

1. No Ph.D. faculty available.
2. More focus on research and faculty professional development sought as compared to other institutes.

1.3.1 d. Significant Future Development Plans:

1. Upgradation of Workshops
2. Construction of New Workshop for Lapidary facility.
3. Development of New courses, including full initiation of software such as Matrix.
4. Short Courses, artists' talks, workshops and collaborations with local & international designers and artists.
5. Membership of different bodies relevant to gems and jewellery discipline, like Klimt, AJF, ACJ etc.

Standard 1.4: The department must assess its overall performance periodically using quantifiable measures.

1.4.1: Performance Measures

Department assesses the overall performance using quantifiable measure.

- Students enrollment;
- Number of Graduating Students;
- Student Teacher ratio;
- Attrition Rate;
- Number of Publications/Exhibitions;
- Books in library.

Table 3: Student's Enrollment

Program	Year of Enrollment	No. of Enrolled students
B. Des. in Jewellery Design and Gemological Sciences	2020-2024	42
	2019-23	33
	2018-22	23
	2017-21	21
	2016-20	18
	2015-19	18
	2014-18	22
	2013-17	10
	2012-16	12

Table 4: Number of Graduating Students

B. Des. Program	Year of Enrollment	No. of Students
B. Des. in Jewellery Design and Gemological Sciences	2017-21	16
	2016-20	18
	2015-19	18

Table 5: Student Faculty Ratio (Permanent/Regular)

Year	No of students	Faculty	No. of Students per Faculty
2018	41	4	10
2020	72	6	12
2021	96	6	16

Table 6: Attrition Rate

Program	Year	Attrition Rate
B. Des. in Jewellery Design and Gemological Sciences	2018	22

Table 7: Number of Publications/Exhibitions

Year	Publications/Exhibitions	Author/Exhibitor
2015	2	Amina Rizwan
2017	2	Amina Rizwan, Ali Raza (LUMS)
2017	1	Muhammad Umar
2018	1	Muhammad Umar
2019	3	Amina Rizwan
2019	1	Muhammad Umar
2020	1	Amina Rizwan

2020	1	Muhammad Umar
2022	1	Muhammad Umar (Exhibition/Lahore)
2022	1	Amina Rizwan (Paper/Conference Publication)

Table 8: Books in Library

Year	Total Books
2015	200 (Approx.)
2017	342
2020-21	1450

1.4.2 Research Areas

2. Revival of “Kundan Meena” in Pakistan
3. Metalworks and techniques of Mughal Era (Amina Rizwan: PIFD Research Workshop)
4. Color Stones of Pakistan and their international trade
5. Revival of Brooch in Pakistan.
6. Generative Art
7. Design Pedagogy as Process of Creation- Amina Rizwan (IVS, Pakistan)
8. Locating and documenting the traditional jewelers’ families of Lahore (Amina Rizwan/PIFD Research Pursuits Workshop)
9. Traditional jewelry- Shuja ur Rahman-PIFD Research Pursuits Workshop)
10. History of drafting (Pakistan) Qurat ul Ain- PIFD Research Pursuits Workshop

FALL SEMESTER (2nd Year)

<i>Teaching Period</i>	<i>Dates</i>	<i>Weeks</i>
<i>Teaching Period including Mid-Term Examinations</i>	<i>20th December, 2021 To 15th April, 2022</i>	<i>16 Weeks</i>
<i>Final Examinations</i>	<i>18th April, 2022 To 29th April, 2022</i>	<i>02 Weeks</i>

SPRING SEMESTER (2nd Year)

<i>Teaching Period</i>	<i>Dates</i>	<i>Weeks</i>
<i>Teaching Period including Mid-Term Examinations</i>	<i>2nd May, 2022 To 26th August, 2022</i>	<i>16 Weeks</i>
<i>Final Examinations</i>	<i>29th August, 2022 To 9th September, 2022</i>	<i>02 Weeks</i>

v. DEPARTMENT OF GEMS AND JEWELLERY DESIGN AND

vi. DEPARTMENT OF CERAMIC AND GLASS DESIGN

FALL SEMESTER

<i>Teaching Period</i>	<i>Dates</i>	<i>Weeks</i>
<i>Teaching Period including Mid-Term Examinations</i>	<i>22nd November, 2021 To 04th March, 2022</i>	<i>16 Weeks</i>
<i>Final Examinations</i>	<i>7th March, 2022 To 21st March, 2022</i>	<i>02 Weeks</i>

SPRING SEMESTER

<i>Teaching Period</i>	<i>Dates</i>	<i>Weeks</i>
<i>Teaching Period including Mid-Term Examinations</i>	<i>28th March, 2022 To 15th July, 2022</i>	<i>16 Weeks</i>
<i>Final Examinations</i>	<i>18th July, 2022 To 1st August, 2022</i>	<i>02 Weeks</i>

Proposed Academic Calendar of Both Departments:

- Spring semester is in progress which is concluding on 15th November, 2021.*
- Fall semester will start after completion of spring semester.*

Criterion 2: CURRICULUM DESIGN AND ORGANIZATION

Scheme of Study

Bachelor of Design (Jewellery Design and Gemological Sciences)

Session 2018-2022

Programme Credit Hours: 131

Semester-I

Course Code	Course Title	Credit Hours
1. ENG-101	English-I (Compulsory)	2(2+0)
2. PKST-102	Pakistan Studies (Compulsory)	2(2+0)
3. DRW-103	Basic Drawing-I	3(0+3)
4. DHT-104	Design History and Theory-I	1(1+0)
5. DC-105	Digital Communication-I (Compulsory)	2(1+1)
6. HAC-106	History of Art and Culture-I	1(1+0)
7. MNM-107	Material and Models	3(0+3)
8. SHP-108	Shaping-I	3(0+3)
Total:		17 (17)

Semester-II

Course Code	Course Title	Credit Hours
9. ENG-151	English-II (Compulsory)	2(2+0)
10. ISL-152	Islamic Studies (Compulsory)	2(2+0)
11. DRW-153	Basic Drawing-II	3(0+3)
12. DHT-154	Design History and Theory-II	1(1+0)
13. DC-155	Digital Communication-II (Compulsory)	2(0+2)
14. HAC-156	History of Art and Culture-II	1(1+0)
15. MATH-157	Mathematics (Compulsory)	3(0+3)
16. SHP-158	Shaping-II	3(0+3)
Total:		17 (34)

Semester-III

Course Code	Course Title	Credit Hours
17. ENG-201	English-III (Compulsory) (Communication Skills and	2(2+0)
18. HCT-202	Handcraft Techniques-I	3(1+2)
19. JDS-203	Jewellery Design Studio-I	3(1+2)
20. JDR-204	Jewellery Drawing Studio-I	2(1+1)*
21. HAC-205	History of Art & Culture Focused on Jewellery-I	1(1+0)
22. CAL-206	Calculations-I	2(2+0)
23. MTS-207	Metallurgical Sciences-I	2(1+1)*
24. DRF-208	Drafting-I	1(0+1)*
25. DGV-209	Digital Visualization and Presentation-I (Adobe Illustrator)	2(1+1)
Total:		18 (52)

Semester-IV

Course Code	Course Title	Credit Hours
26. HCT-251	Handcraft Techniques-II	3(1+2)

27. JDS-252	Jewellery Design Studio-II	3(1+2)
28. JDR-253	Jewellery Drawing-II	2(1+1)*
29. HAC-254	History of Art and Culture focused on Jewellery - II	1(1+0)
30. JCL-255	Jewellery Calculations-II	2(2+0)
31. DRF-256	Drafting-II	2(1+1)
32. MTS-257	Metallurgical Sciences-II	2(1+1)*
33. DGV-259	Digital Visualization and Presentation-II (Intro to CAD)	1(0+1)*
34. GEM-260	Introduction of Gemstone Identification	2(1+1)
Total:		18 (70)

Semester-V

<u>Course Code</u>	<u>Course Title</u>	<u>Credit Hours</u>
35. ENG-301	English- IV (Compulsory)	1(1+0)
36. HCT-302	Handcraft Techniques-III	3(1+2)
37. JDS-303	Jewellery Design Studio-III	3(1+2)
38. DRF-304	Drafting-III	2(0+2)
39. GEM-305	Gemology-I	2(1+1)
40. JCL-306	Jewellery Calculations-III (Costing)	1(1+0)
41. PTM-307	Product Marketing-I	2(2+0)
42. CAD-308	CAD/CAM (Matrix)	2(1+1)
43. DRW-309	Jewellery Drawing Studio-III	1(0+1)
Total:		17 (87)

Semester-VI

<u>Course Code</u>	<u>Course Title</u>	<u>Credit Hours</u>
44. ENG-351	English-V (Compulsory)	2(2+0)
45. HCT-352	Handcraft Technique-IV	3(1+2)
46. GEM-353	Gemology-II	2(1+1)
47. HAC-354	History of Art and Culture Focused on Jewellery-III	2(2+0)*
48. JCL-355	Jewellery Calculations-IV (Costing)	1(1+0)
49. CAD-356	CAD/CAM-II (Matrix)	2(1+1)
50. PTM-357	Product Marketing-II	2(2+0)
51. JDS-358	Jewellery Design Studio – IV (Mini Thesis)	3(1+2)*
Total:		17 (104)

Semester-VII

<u>Course Code</u>	<u>Course Title</u>	<u>Credit Hours</u>
52. ENG-401	English- VI (Compulsory)	2(2+0)
53. HPT-402	Handcraft and Production Techniques-I	3(1+2)
54. JDS-403	Collection: Jewellery Design Studio-V	4(1+3)
55. RMT-404	Research Methodology	2(2+0)
56. INT-405	Internship	2(0+2)*
Total:		13 (117)

Semester-VIII

<u>Course Code</u>	<u>Course Title</u>	<u>Credit Hours</u>
57. ENG-451	English-VII (Compulsory)	2(2+0)
58. JDS-452	Collection: Jewellery Design Studio-VI	3(1+2)*
59. JDS-453	Collection: Jewellery Design Studio-VII	3(1+2)*
60. HCT-454	Collection: Handcraft and Production Technique-II	3(1+2)*
61. HCT-455	Collection: Handcraft and Production Technique-III	3(1+2)*

Following Non-Credit Course may be offered to take away any deficiency:

GEM-210 Basic Gemology
 ENG-261 English (Communication Skills and Business Writing)

Please Note: Steric (*) mark will indicate the changings / amendments were approved from 07th meeting of Board of studies and vide Registrar office notification refer #. PIFD/REG/AC/173 under (point #. 1).

Table 10: Curriculum Course Requirements – B. Des. Jewellery Design and Gemological Sciences

- 1) Definition of credit hour: one (01) credit hour is equivalent to 15-16 teaching hours per semester.

Curriculum Breakup	Credit Hours
Humanities and Social Sciences.	
English-I (Compulsory)	2
Pakistan Studies (Compulsory)	2
English-II (Compulsory)	2
Islamic Studies (Compulsory)	2
English-III (Compulsory) (Communication Skills and	2
Metallurgical Sciences-I	1
Metallurgical Sciences-II	1
English – IV (Compulsory)	1
English – V (Compulsory)	2
English – VI (Compulsory)	2
Statistics and Mathematics	
Mathematics (Compulsory)	3
Calculations-I	2
Drafting-I	2
Jewellery Calculations-II	2
Drafting-II	2
Drafting-III	2
Jewellery Calculations-III (Costing)	1
Jewellery Calculations-IV (Costing)	1
Management Sciences/Marketing	
Product Marketing-I	2

Product Marketing-II	2
Research Methodology	2
Core Courses	
Basic Drawing-I	3
Design History and Theory-I	1
Digital Communication-I	1
History of Art and Culture-I	1
Material and Models	3
Shaping-I	4
Basic Drawing-II	3
Design History and Theory-II	2
Digital Communication-II	2
History of Art and Culture-II	1
Shaping-II	2
Handcraft Techniques-I	3
Jewellery Design Studio-I	3
Jewellery Drawing Studio-I	2
History of Art & Culture focused on Jewellery-I	1
Digital Visualization and Presentation-I (Adobe Illustrator)	2
Handcraft Techniques-II	3
Jewellery Design Studio-II	3
Jewellery Drawing-II	2
History of Art and Culture focused on Jewellery - II	1
Digital Visualization and Presentation-II (Intro to CAD)	2
Introduction of Gemstone Identification	2
Handcraft Techniques-III	3
Jewellery Design Studio-III	3
Gemology-I	2
History of Art & Culture focused on Jewellery-III	1
CAD/CAM (Matrix)	2
Jewellery Drawing Studio-III	1
Handcraft Technique-IV	3
Jewellery Design Studio-IV	3
Gemology-II	2
History of Art and Culture Focused on Jewellery-IV	1
CAD/CAM-II (Matrix)	2
Mini Thesis	2
Handcraft and Production Techniques-I	3
Jewellery Design Studio-V	4

Final Thesis / Project	
English-VII (Dissertation Writing-II)	2
Handcraft and Production Technique-II	6
Jewellery Design Studio-VI	6
Total Credit Hours	131

Table 11: Details of Curriculum Breakup – B. Des. Jewellery Design and Gemological Sciences

Semester	Course Number	Statistics and Mathematics	Humanities and Social Sciences	Management Sciences/Marketing	Core Courses	Final Thesis / Project
1	ENG-101 PKST-102 DRW-103 DHT-104 DC-105 HAC-106 MNM-107 SHP-108		ENG-101 PKST-102		DRW-103 DHT-104 DC-105 HAC-106 MNM-107 SHP-108	
2	ENG-151 ISL-152 DRW-153 DHT-154 DC-155 HAC-156 MATH-157 SHP-158	MATH-157	ENG-151 ISL-152		DHT-154 DC-155 HAC-156 SHP-158	
3	ENG-201 HCT-202 JDS-203 JDR-204 HAC-205 CAL-206 MTS-207 DRF-208 DGV-209 GEM-210	CAL-206 DRF-208	ENG-201 MTS-207		HCT-202 JDS-203 JDR-204 HAC-205 DGV-209 GEM-210	
4	HCT-251 JDS-252 JDR-253 HAC-254 JCL-255 DRF-256 MTS-257 DGV-259	JCL-255 DRF-256	MTS-257 ENG-261		HCT-251 JDS-252 JDR-253 HAC-254 DGV-259 GEM-260	

	GEM-260 ENG-261					
5	ENG-301 HCT-302 JDS-303 DRF-304 GEM-305 HAC-306 JCL-307 PMK-308 CAD-309 DRW-310	DRF-304 JCL-307	ENG-301	PTM-308	HCT-302 JDS-303 GEM-305 HAC-306 CAD-309 DRW-310	
6	ENG-351 HCT-352 JDS-353 GEM-355 HAC-356 JCL-357 CAD-358 PMK-359 THS-360	JCL-357	ENG-351	PTM-359	HCT-352 JDS-353 GEM-355 HAC-356 CAD-358 THS-360	
7	ENG-401 HCT-402 JDS-403 CAD-404 GEM-405 HAC-406 RMT-407		ENG-401	RMT-407	HCT-402 JDS-403 CAD-404 GEM-405 HAC-406	
8	ENG-451 HCT-452 JDS-453					ENG-451 HCT-452 JDS-453
Total (131)						

Standard 2.1: The curriculum must be consistent and supports the program's documented objectives.

Bachelor of Design in Jewellery Design and Gemological Sciences program contents/courses meet the program objectives as shown below in the table.

Table 12.1: Bachelor of Design Courses versus Program Objectives

Courses	Objectives				
	1	2	3	4	5
ENG-201		X		X	
HCT-202					X

JDS-203	X	X	X	X	X
JDR-204	X	X	X	X	X
HAC-205	X	X	X	X	X
CAL-206	X	X			
MTS-207	X	X	X		
DRF-208	X	X			
DGV-209	X	X			
GEM-210	X	X			
HCT-251	X	X			
JDS-252					X
JDR-253	X	X	X	X	X
HAC-254	X	X			
JCL-255	X	X	X	X	
DRF-256	X	X			
MTS-257	X	X			
DGV-259	X	X			
GEM-260	X	X			
ENG-261	X	X	X		X
ENG-301				X	
HCT-302	X	X			
JDS-303	X	X	X	X	
DRF-304	X	X	X	X	X
GEM-305	X	X	X		
HAC-306	X	X	X		X
JCL-307	X	X	X		X
PMK-308	X	X	X	X	X
CAD-309				X	
DRW-310	X	X	X	X	X
ENG-351	X	X	X		
HCT-352	X				
JDS-353	X	X	X		
GEM-355	X	X	X		
HAC-356	X	X	X		
JCL-357	X	X	X		
CAD-358	X	X			
PMK-359	X	X	X	X	X
THS-360	X	X	X		X
ENG-401	X	X	X	X	X
HCT-402	X	X	X	X	X
JDS-403	X	X	X	X	X
CAD-404	X	X			
GEM-405					
HAC-406	X	X	X	X	
RMT-407	X	X		X	
ENG-451	X	X	X	X	
HCT-452	X	X			

JDS-453	X	X	X	X	
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Standard 2.2: Theoretical background, problem analysis and solution design must be stressed within the program's core material.

Program: Bachelor of Design in Jewellery Design and Gemological Sciences

The modules of the program adequately address:

1. Handcraft techniques and design solutions.
2. Development of analytical skills
3. Application of the theoretical knowledge
 - Some of the modules include the theoretical background and contain problem solving and solution design while the others deal with Problem analysis and Solution design separately.
 - Great emphasis of the program is on application of practical and theoretical knowledge.

Table 12.2: Standard 2-2 requirement

Elements	Courses
Theoretical Background	20
Development of analytical skills	5
Application of the theoretical knowledge	26

Standard 2.3: The curriculum must satisfy the core requirements for the program as specified by the respective accreditation body.

The curriculum satisfies both the core requirements of credit hours and criteria of admission laid down by Higher Education Commission (HEC) and the concerned accreditation body in accordance with the international standards.

Standard 2.4: The curriculum must satisfy the major requirements for the program as specified by HEC, the respective accreditation body / councils.

The curriculum satisfies major requirements of the program. No formal accreditation with any professional body but it fulfills all the basic and necessary requirements of accreditation body. The programs curriculum has been approved by the Board of Studies and the Academic Council of Pakistan Institute of Fashion and Design as specified by the HEC.

Standard 2.5: The curriculum must satisfy general education, arts and professional and other discipline requirements for the program as specified by the respective accreditation body / councils.

The curriculum satisfies general education discipline requirements. No formal accreditation with any professional body but it fulfills all the basic and necessary requirements of accreditation body.

The programs curriculum has been approved by the Board of Studies and the Academic Council of Pakistan Institute of Fashion and Design as specified by HEC.

Courses	IT Contents
Digital Visualization and Presentation-I	Adobe Illustrator Adobe Photoshop
Digital Visualization and Presentation-II	Introduction to CAD
CAD/CAM	Matrix
CAD/CAM-II	Matrix

Standard 2.6: Information technology component of the curriculum must be integrated throughout the program.

The requirement for integrating information technology component is fulfilled by a few technical courses which deal with the implication of certain software in the field of gems and jewellery. The students' presentations on power point in almost every semester also make them proficient in the use of technology.

Standard 2.7: Oral and written communication skills of the student must be developed and applied in the program.

Oral and written communication skills of the students are developed by the structurally designed courses of English, class discussions and presentations.

Course Code	Title
ENG-201	English-III (Compulsory)(Communication Skills and Academic Writing
ENG-261	English Communication Skills and Business Writing
ENG-301	English-IV (Compulsory)
ENG-351	English-V (Compulsory)
ENG-401	English-IV (Compulsory) (Dissertation Writing-I)
ENG-451	English-IV (Compulsory) (Dissertation Writing-II)

Criterion 3: LABORATORIES AND COMPUTING FACILITIES

Standard 3.1: Laboratory manuals / documentation / instructions for experiments must be available and readily accessible to faculty and students.

Laboratory manuals / documentation / instructions for experiments are available and readily accessible to faculty and students. Before starting work in laboratory, students are given in-depth presentation regarding machines/equipment and their handling. Aprons and gloves are used for safety measures. Teacher and technicians are always present during the laboratory work. The gems and jewellery department currently owns Handcraft Studio-I, Handcraft Studio-II and Gemology Lab. All laboratories are maintained.

Standard 3.2: There must be adequate support personnel for instruction and maintaining the laboratories.

All laboratories have adequate supports system; technicians are always present in their respective laboratories. In case of load shedding, laboratories are provided with a power back up.

Standard 3.3: The University computing infrastructure and facilities must be adequate to support the program's objectives.

The computing infrastructure is adequate. There are 4 computer laboratories. The number of computers are frequently under review.

Name Softwares which are being taught in computer laboratories

Semester	Software's
03	Adobe Photoshop
04	Introduction to CAD
05 & 06	CAD/CAM/ Matrix

Criterion 4: STUDENT SUPPORT AND ADVISING

Standard 4.1: Courses must be offered with sufficient frequency and number of students to complete the program in a timely manner.

The department offers Bachelor degree Program in Jewellery Design & Gemological Sciences once a year. This four year intensive program exposes students to the study of design both in theory and practice. There are two semesters in an academic year i.e. Fall and Spring. Fall semester normally starts in August/September and Spring semester normally start in January/February. The department follows its time table for undergraduate programs strictly to complete the program well in time.

Standard 4.2: Courses in the major area of study must be structured to ensure effective interaction between students, faculty and teaching assistants.

Course allocation is made in the meeting of the faculty members. The Course Coordinator/Head of Department presides over the meeting. The program is structured in a manner to ensure effective interaction between faculty and students. Permanent faculty members are available on campus to facilitate students who require additional help. During lectures, students are encouraged to participate in discussions in order to boost their confidence and to encourage healthy discussions that will add value to the students' knowledge. In studio subject teachers remain in the class throughout the day to facilitate students further on development stage, the laboratory technicians are always there to handle the machines and supervise the work in the laboratories.

Standard 4.3: Guidance on how to complete the program must be available to all students and access to academic advising must be available to make course decisions and career choices.

A student program-counseling session is organized in the month of August each year so that students from the Foundation Year Studies can be facilitated in making choices regarding which department they can opt for. Program coordinators and faculty members guide the students to facilitate this decision making process. Furthermore, the faculty remains in contact with the industry and constantly guides the students to make informed career decisions.

In case of personal difficulties student may seek advice in confidence from the student counselor, course coordinator, a member of the teaching staff or the Vice Chancellor.

Criterion 5: PROCESS CONTROL

Standard 5.1: The process by which students are admitted to the program must be based on quantitative and qualitative criteria and clearly documented. This process must be periodically evaluated to ensure that it is meeting its objectives.

Bachelor of Design in Jewellery Design and Gemological Sciences (4 Year Degree Program)

Candidates are selected on the basis of entry test and interview in the first year. The candidates are admitted provisionally and the verification committee confirms admission after the verification of educational and other required documents. BS Jewelry Design and Gemological Sciences is a 4-year degree program with minimum 131 credit hours. The program is divided into 8 semesters with 2 semesters each year.

Admission Criteria

Foundation Year Studies Intermediate with 50% marks (550/1100) or A-Level with minimum 3 full subjects.

Equivalence Certificates for examinations other than FA/FSc. are required from IBCC at the time of Interview. Compulsory Aptitude Test (English, Mathematics, General Knowledge, Drawing and Creative Skills) followed by the Interview.

B.Des. Jewellery Design and Gemological Sciences Students who obtain a minimum of CGPA of 2 and above (on average) in Foundation Year Studies are eligible for enrollment in the Program of Jewellery Design and Gemological Sciences. The admission of the students also depends upon the number of seats available in the department every year.

The said criteria is periodically evaluated to ensure that it is meeting its objectives.

Credit Transfer Policy

Under extra-ordinary circumstances, the Vice-Chancellor, on the recommendations of the chairperson/Coordinator of the Department, may allow transfer of credits of students from HEC recognized institutions to any department of the institute and vice versa provided in PIFD Student Handbook.

Standard 5.2: The process by which students are registered in the program and monitoring of student's progress to ensure timely completion of the program must be documented. This process must be periodically evaluated to ensure that it is meeting its objectives.

The academic progress and attendance of the students is monitored closely by the faculty members and the Course Coordinator / Head of Department. Students are informed before the mid-terms and near the final exams of their attendance in the classes. Students are required to maintain 75% class attendance. Counseling sessions are also held if need arises. In case of any issue regarding the student progress, class attendance, class participation and behavior, the matters can be taken aboard by the department examination committee and disciplinary committee with the consent of the faculty.

Standard 5.3: The process of recruiting and retaining highly qualified faculty members must be in place and clearly documented. Also processes and procedures for faculty evaluation, promotion must be consistent with the institution mission statement. These processes must be periodically evaluated to ensure that it is meeting its objectives.

The statutes are clearly indicated for recruitment and retaining of faculty members duly approved by the Statutory Bodies of the Institute. A Human Resource Department is in place in this respect. This department advertises the positions as and when need arises in the national press to invite applications from the eligible candidates. The Selection Board comprising of the Dean, Head of Department, eminent persons from industry and subject experts headed by the Vice Chancellor recommends the candidate after evaluation of academic credentials and interview. The Senate, on the recommendations of the Selection Board and Syndicate, selects the candidates for the appointment in the Institute and the whole process is transparent and well documented.

Annual confidential/performance report are also maintained which ultimately support the retention and promotion of faculty members. The performance of the faculty members is also evaluated every semester by the students as well as Head of Departments and the course coordinators evaluate the performance of each faculty member.

Other than academic work faculty members are given task to cultivate the sense of ownership and evaluate their performance at different levels. Annual Confidential/ Evaluation Reports are maintained for each faculty member for their increments and promotions.

Standard 5.4: The process and procedures used to ensure that teaching and delivery of course material to the students emphasizes active learning and that course learning outcomes are met. The process must be periodically evaluated to ensure that it is meeting its objectives.

Time table is strictly followed by all faculty members. There are other different processes to ensure that the teaching and delivery of the program material to the students emphasizes active learning. For instance small tasks are given to students in classrooms to check their learning outcomes, assignments and projects are given to students based on application of knowledge to enhance their

understanding. Mid Term Exams and Final Exams are held to evaluate the learning of the student. Class discussions are encouraged to enhance better learning. Student feedback is taken on Course Evaluation Questionnaire at the end of the semester. Curriculum committee meeting is held each year to evaluate the courses according to the new advancement in the industry and current time; the committee members comprise of Course Coordinator, senior faculty members, persons from the academia and working professionals from the relevant field.

Marks Range	Grade Point	Letter Grade
85-100	4.00	A+
80-84	3.70	A
75-79	3.30	B+
70-74	3.00	B
60-69	2.00	C
50-59	1.00	D

Standard 5.5: The process that ensures that graduates have completed the requirements of the program must be based on standards, effective and clearly documented procedures. This process must be periodically evaluated to ensure that it is meeting its objectives.

In order to ensure that the outgoing students have completed the requirements of the programs are based on standards. The department and faculty strictly abide by the rules made by the institute. These procedures are reviewed on regular basis periodically.

Grading System:

Formula for calculating the GPA and CGPA:

$$\text{GPA} = \frac{\sum (\text{GP} \times \text{Credit Hours}) \text{ courses of a semester}}{\text{Total Credit Hours of a semester}}$$

$$\text{CGPA} = \frac{\sum (\text{GP} \times \text{Credit Hours}) \text{ of all courses}}{\text{Total Credit Hours of all courses}}$$

Criterion 6: FACULTY

Standard 6.1: There must be enough full time faculty who are committed to the program to provide adequate coverage of the program areas/courses with continuity and stability. The interests and qualifications of all faculty members must be sufficient to teach all courses, plan, modify and update courses and curricula. All faculty members must have a level of competence that would

normally be obtained through graduate work in the discipline. The majority of faculty must hold Ph.D. in the discipline.

There are 6 full time permanent faculty members in the department. The interest and qualifications of all faculty members are pre-judged and monitored for each course forming a part of the program. The level of competency of the faculty members are evaluated at time of induction and monitored during teaching. Out of these 4 faculty members, 2 hold Master's degree (Foreign) and 1 holds Master's Degree (Local), while 2 hold a Bachelor's degree.

Program Area	Modules in area and semester per year	Number of faculty members in each area	Number of faculty with Ph.D degree
B.Des. Jewellery Design and Gemological Sciences	8 Courses + Project	2	Nil

Standard 6.2: All faculty members must remain current in the discipline and sufficient time must be provided for scholarly activities and professional development. Also, effective programs for faculty development must be in place.

Training programs are arranged for faculty members. They are encouraged to attend local as well as international seminars. Two faculty members were sent to Gemological Institute of America, Carlsbad, California for training program of CAD/CAM for 2 months. While in April 2016, two faculty members went to Sri Lanka for gemstone cutting and faceting workshop with selected students. From 2017-2020, faculty members along with students took part in Munich Jewelry week and workshops with selected international artists.

Sr. No.	Faculty	Training Title	Date
1.	Muhammad Umar	Comprehensive CAD/CAM for Jewelry	Oct 2014
2.	Shuja-Ur-Rehman	Comprehensive CAD/CAM for Jewelry	Oct 2014
3.	Amina Rizwan, Humayun Iqbal (Staff)	Gemstones Cutting and Faceting, Malabe, Sri Lanka	April 2016
4.	Amina Rizwan, Shuja Ur Rehman	Jewelry Management Workshop with Barabara Schimidt + Schmuck Attendance	March 2017
5	Muhammad Umar	Jewelry Making Workshop with Nicolas Estrada + Schmuck Attendance	March 2018
6	Qurat-ul-ain Ali	Schmuck Fair + Mosaic and MokumeGane workshop with Stefano Marchetti	March 2019

Standard 6.3: All faculty members should be motivated and have job satisfaction to excel in their profession.

The faculty members are motivated to excel in their profession. They are involved in important decision-making process. The satisfaction of the faculty and the input is being measured by Faculty Survey Form.

Criterion 7: INSTITUTIONAL FACILITIES

Standard 7.1: The institution must have the infrastructure to support new trends in learning such as e-learning.

Academic Building:

- 1. Class rooms/Lecture halls/Studio/
Laboratory available to the department: 08
- 2. Computer laboratory: 01
- 3. Course Coordinator Office: 01

Moreover, Overhead projectors are used in the class rooms and Internet facility is available throughout the department.

Standard 7.2: The library must possess an up-to-date technical collection relevant to the program and must be adequately staffed with professional personnel.

There are more than 1436 books in the library that are relevant to the Jewellery Design and Gemological Sciences program and digital library provide access to wide range of journals and E-books. Moreover, there is professional library staff available for delivering services to students and faculty.

Item	Quantity	Remarks
Text / Reference Books	47	
Periodicals (bound volumes)	6	
Full- text journals	0	
E-books / Journals	200+	
DVDs	0	
Films	0	
Newspapers / Magazines	0	
Other media of knowledge		
Seating capacity	80+	

Standard 7.3: Classrooms must be adequately equipped and offices must be adequate to enable faculty to carry out their responsibilities.

Department of Jewellery Design and Gemological Sciences has five (05) lecture halls /studios / laboratories with all necessary tools and equipment.

The Department has sufficient space to adequately accommodate its faculty and administrative staff. The senior faculty is provided with computers and internet facility is available for all.

Sr. #	Items	Total	Remarks
1	Design Studio	1	
2	Handcraft Studios	2	Separate space allocated for Machine Room
3	Laboratories	3	Gemology Lab, Enameling Lab, Electroplating Lab
4	Computer Laboratories	1	Using General Laboratories
5	Total Computers	40	Computer Lab 02
6	Office for faculty members	03	

Criterion 8: INSTITUTIONAL SUPPORT

Standard 8.1: There must be sufficient support and financial resources to attract and retain high quality faculty and provide means for them to maintain competence as teachers and scholars.

Faculty is hired on high merit grounds set by the Institute which involves both appropriate educational background along with related work experience. The faculty is sent to various training programs to upgrade themselves and meet the international standards. The department is funded by the Federal Government.

Standard 8.2: There must be an adequate number of high quality graduate students, research assistants and Ph.D. students.

The department currently offers only B. Des. Program and each year high quality graduates are produced that get recruited by various companies. The table below shows the number of graduates in B. Des. Program of the Department of Jewellery Design and Gemological Sciences:

Degree Program	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
B. Des. Jewellery Design and Gemological Sciences	18	11	12	29	19	7	22	14	19	16

Standard 8.3: Financial resources must be provided to acquire and maintain library holdings, laboratories and computing facilities.

Library at PIFD holds 9301 books approximately, 30 magazines, 600 thesis reports. A computer laboratory within library comprising of nine (09) computers and fifteen (15) laptops with internet access has been designated for thesis/research work.

Computing facilities at PIFD provide excellent platform to students to enhance their learning capabilities. There are five (05) computer laboratories which are accessible to all students for their use.

Each year certain amount of budget is allocated to enhance these facilities.

Laboratories Equipment Detail

S/No.	Equipment Name	Specification	Qty
1	Casting Machine VC200	Indutherm Germany GmbH Sr No:M16063	1.000
2	Casting Unit	Centrifugal	1.000
3	Circular Saw Fischer	Fischer	1.000
4	Compressor (Portable)	# 25 Ltr	1.000
5	Compressor Lupamat	MAKSAS Izmir Turkey	2.000
6	Cylinder for Oxygen	With 01 Trolley	2.000
7	De waxing Oven	imported swjy sw-72d	1.000
8	Die cutting press	blue local	1.000
9	Document Camera	With Tablet	2.000
10	Draw bench	Graphite finish	1.000
11	Drill Machine	Floot E-3	1.000
12	Drill press flott 10stw	flott 10 stw	2.000
13	Drill press local zj 4113	local zj 4113	1.000
14	Dual Grinder (Cat No. ST-DG)	STERLING, SIRILANKA	1.000
15	Electro Plating Machine		1.000
16	Faceter for Gem Cutting and Polishing	Cat No. Faceter STERLING, SIRILANKA	10.000
17	Faceter for Gem Cutting and Polishing (Cheeter type)	Cat No.Cheeter/ Facr STERLING, SIRILANKA	2.000
18	Fiber Optic Light Source Part # KL5120	Sr # 1512021470, 473, 474 475, & 1512021479	5.000
19	Flexible Shaft	Foredom/SR series	12.000
20	Flexible Shaft Stands	Local Designed	12.000
21	Furnace Electric Fischer	Germany nabertherm /N40-E	1.000
22	Furnace Electric local	gas plus electric reading	1.000
23	Furnace Inlay melting electric	graficarbo Italy GF1100ND	1.000
24	Grinder Fischer GDS-150	Fischer GDS-150	1.000
25	Grinder scheppach	bgs 700	1.000
26	Hot Plates	Electric Stove of 2 plates	1.000
27	Hydraulic press rubber molding	vacutech Germany type V3	1.000
28	Hydraulic press rubber molding	vacutech Germany type V3	1.000

29	Illumination Polarise cope Part # PK 14LED	Sr # 6414020122, 144, 145 179,184 & 6414020197	6.000
30	INDUS MIX4for VC/VTC200 including vibrator plate for 3kginvestmentand	one flask ømax=145 h=260mm Cat,71404013 INDUTHERM GERMANY Sr No:1504322	1.000
31	Melting Furnace	Local with Blower Fitting	1.000
32	Melting gun	yildiz 38-09	1.000
33	Melting Gun	Local	1.000
34	Micro Moter		2.000
35	Pen plating unit junior	120 HM04050560/01	1.000
36	Pickle Pot		1.000
37	Pickling Pot (not in use)	Old	2.000
38	Pickling Pot B120015	Pandora Alloys SRL, Italy	2.000
39	Polishing machine	Pakistan/gold	2.000
40	PUK		1.000
41	Quartz Immersion Heater	for Galvanic Machines, Turkey Sr # 6460411057, 059, 060 061, 089, 095, 096, 108, 110 & 6460411118	2.000
42	Refractometer# ER604		10.000
43	Ring bending machine	Fischer Germany	1.000
44	Rolling Mill	(Electrical)	1.000
45	Rolling mill	local zubairs	1.000
46	Rolling Mill	Durston/DRM/C130	1.000
47	Rolling Mill (Manual)	Durston w/130 Imported	1.000
48	Rolling Mill (Manual)	DRM F-30	1.000
49	Sand blasting machine	renefert Fischer/01	1.000
50	Stone Faciting Machine	CAVALESE (TN) Italy	1.000
51	Texturing Rolling Mill	UK	1.000
52	Tumbler (New)	GR No. 194 dated 25-9-2013	1.000
53	Tumbler (not in use)	Old	1.000
54	Ultra Sonic Cleaner		1.000
55	Ultra Sonic Cleaner		1.000
56	Vacume Pump,20m3/h	Including Gas Blast Filter cat,71000121 Sr No:15110053	1.000
57	Vacuum Casting/Investing Machine	teknik dokum Turkey Sr # 101101	1.000
58	Vacuum machine sunhara casting	unit m.saeed & sons	2.000
59	Vacuum machine sunhara casting	m.saeed & sons/02	1.000
60	Vulcanizer press sunhara casting	units m.saeed & sons	1.000
61	Vulcanizer press sunhara casting	m.saeed & sons/05	4.000
62	Water Cooler,4kW-cooling power with pump 3 bar,for meximum ambinet temperature of 46°C	with 6m tube øi=8mmCat,71000162 INDUTHERM GERMANY Sr No:2200265911	1.000
63	Water Distillation Unit	Local /Silver	1.000
64	Water Jet Cabinet High Pressure	Olympia local wx-45A	1.000
65	Wax injector graphite	m.saeed & sons	4.000
66	Wax injector sunhara casting units	m.saeed & sons	1.000

67	Wax Injector Vacutech	with Foot Pump	1.000
68	Wax Injector Vacutech	with Foot Pump	1.000
69	Wax welder	imported	1.000
70	Wax welder + Spru	Vario Welder Imported	1.000
71	Wax welder national	Ijaz brothers set of 2pcs	1.000
72	Weighing scale electronic	Sartorius GE812	1.000
73	Weighing scale electronic	Chinese plastic # 5kg-1gm	1.000
74	Weighing Scale YAMATA HX-Z2	30 Kg x 1 g	1.000

General Equipment's

1	Anvil horn Black	Anvil horn 98-135	1.000
2	Anvil (Stack) Grey	Stack 30	1.000
3	Anvil horn Black	horn 19 Round Shape	1.000
4	Anvil kanca Black	forged 35	1.000
5	Anvil Square	# 28-60 Black	1.000
6	Anvil Square	# 80 Grey	1.000
7	Anvil square	local 5''x5''	1.000
8	Anvil Square Grey	square/60	1.000
9	Anvil square Grey	square/80	1.000
10	Anvil Stack	# 40 Grey	1.000
11	Anvil Stack Black	Germany 41 - 40	1.000
12	Bangle Mandrel	Metal	2.000
13	Bangle Mandrel	Wooden	1.000
14	Bench shear	kanca 2 br	2.000
15	Bench vise	Stanley 4''	2.000
16	Bench vise	Stanley 5''	1.000
17	Bench vise	teknik dokum	9.000
18	Bunsen Burner	Bunsen	1.000
19	Bunsen Burner	With stand and 02 Mesh	1.000
20	Crucible Graphite	Issued from CDD/5	2.000
21	Crucible tongs	holding & pouring	2.000
22	Crucible Tongs	melting furnace/ graficarbo	1.000
23	Fire Extinguisher	Soda	1.000
24	Flasks Perforated	furnace/local/2'' .5'''	15.000
25	Flasks Perforated	furnace/local/3'' .3'''	3.000
26	Handcraft table lamps	Black	24.000
27	Ingot mold	local/medium	2.000
28	Naclace Mandrel	India	1.000
29	Nozzle Set of Oxygen Cyl		1.000
30	Plastic Containers	Turkey (Jars)	20.000
31	Rubber molding frames	local set of 5 pcs	1.000
32	Rubber molding frames	local	2.000
33	Rubber molding frames	Double Hole	1.000
34	Rubber molding frames	Imported	4.000
35	S S Bucket (Without Lid)	For Dipping Hot Flasks	1.000

36	Saucepan	Stain Less Steel	1.000
37	Scoop Stain Less Steel	Local	1.000
38	Sliding ingot mold	adjustable clamp	1.000
39	Soldering Gun		25.000
40	Soldering guns	Yildiz M30-08	20.000
41	Soldering Plates	Small	8.000
42	Soldering Plates	Small	3.000
43	Soldering Plates	Large	2.000
44	Soldering Plates Rotating	Rotating	1.000
45	SS Pail With Lid	Approximately # 3 Ltr	1.000
46	Stand of Bunsen Burner	Bunsen Burner	1.000
47	Steam Cleaner Electroplating	Fischer Germany	1.000
48	Steel Bowl	Contains Sand	1.000
49	Steel Bowl	Common Use	2.000
50	Steel Bowl	Contain Sand	1.000
51	Steel Bowl	Contain Water	1.000
52	Steel sheet	flat making flask # 1'x2'	1.000
53	Table Lamp	Electrical	1.000
54	Third Hand Soldering	Third Hand	2.000
55	Tong for Flask Adjustable	round	2.000
56	Tong for Universal Crucible	Grobet Local	7.000
57	Tool Boards		3.000
58	Tools board	Wooden	1.000
59	Vacuum Cleaner	Delux GR 083/12	1.000
60	White Board		1.000
61	Wooden Log	# 36" X 18"	1.000
62	Wooden Log	# 30" X 16"	1.000
63	Wooden Log (No 007)	# 36" X 18"	1.000
64	Cylinder for LPG	Small	6.000
65	Cylinder for LPG	# 23 Kg	1.000

Sr. No.	Item Name	Item Brand	Qty. /No. of Items
<u>Handcraft-01 & 02, CMR and Gemology Lab</u>			
1.	Rolling Mills	Dustan	05
2.	Flex Shafts	Foredom	15
3.	Ultra Sonic	-	02
4.	Bangle Bending Machine	-	01
5.	Weighing Scale	-	03
6.	Buffing Machine	Forman	03
7.	Drill Machines	-	03
8.	Grinders	-	02
9.	Trim Saw	-	01

10.	Faceting Machine	-	01
11.	Die Press	-	01
12.	Acid Pots	-	02
13.	Microscope	-	11
14.	S.G. Balance	-	01
15.	Vacuum Machine	-	01
16.	De waxing Oven	-	01
17.	Furnace	Northern	02
18.	Washer	-	01
19.	Vulcanizing Press	-	03
20.	Wax Injectors	-	03
21.	Wax Welders	-	01
22.	Compressors	-	04
23.	Microscope		10

