NATIONAL UNIVERSITY OF COMPUTER & EMERGING SCIENCES

INTER OFFICE MEMO

No. CV-PEC-02

October 31, 2014

To: Dean (Academics), FAST-NU, HO, Islamabad

From: Director, FAST-NU-Lahore Campus

**Subject: Provision of Necessary Data Pertaining to Civil Engineering Program**

1. Please refer to letter no. PEC/Accr/004/2014 dated October 17, 2014 of PEC on the above subject (copy attached). The required data of Civil Engineering Progam at FAST-NU, Lahore Campus is compiled as per prescribed format (Table I to VI).
2. A softcopy of the same data is also submitted at e-mail IDs (To: ayub.alvi@nu.edu.pk, CC: latif.virk@nu.edu.pk).
3. As per requirement of PEC, this data should also be posted on University Website.
4. As per requirement of PEC, a softcopy of data should be submitted to kmnasir@pec.org.pk & msohail@pec.org.pk.

Kindly send the compiled data in hard and soft forms to PEC.

Sd/-
(Dr. Syed Iftikhar Ahmed)
Incharge, Department of Civil Eng.

Sd/-
(Dr. Zafar Iqbal)

**Table-I: Accreditation Status (Program-Wise)**

|  |  |  |  |
| --- | --- | --- | --- |
| **S #** | **Program Title** | **Accreditation of Intake Batches(Intake From-To)** | **Green SignalZero/interim Visits(Intake From-To)** |
| 1 | BS (Civil Engineering) | Batch 2011-2014 | Green signal was given to start program in 2011 with an intake of 40 students.In 2012 it was allowed to take 80 students in scope of change visit.Interim visit report has been submitted to PEC. |

**Table-II: STUDENT SUMMARY (PROGRAM-WISE)**

**Name of Engineering Program: BSc Civil Engineering**

|  |  |  |  |
| --- | --- | --- | --- |
| **Study Year** | **Batch/Enrolment Year** | **No of Students** | **No of Sections** |
| 1st Year | 2011 | 33 | 1 |
| 2nd Year | 2012 | 59 | 2 |
| 3rd Year | 2013 | 76 | 2 |
| 4th Year | 2014 | 90 | 2 |
| Total | 258 | 7 |

**Table-III: FACULTY SUMMARY (PROGRAM-WISE)**

**Name of Engineering Program: BSc Civil Engineering**

|  |  |  |
| --- | --- | --- |
|  | **Faculty teaching Engineering Subjects** | **Faculty teaching Non-Engineering Subjects** |
|
| **BSc** | **MSc** | **PhD** | **Total** | **BSc** | **MSc** | **PhD** | **Total** |
| **Program Faculty (Dedicated)** | 6 | 2 | 5 | 13 | Nil | Nil | Nil | Nil |
| **Program Faculty (Shared with other programs)** | Nil | Nil | Nil | Nil | Nil | Nil | Nil | Nil |
| **Shared Faculty (from other programs)** | Nil | Nil | Nil | Nil | 5 | 6 | 4 | 15 |
| **Visiting Engg. Faculty(from Industry, or other university)** | 2 | Nil | 1 | 3 | Nil | Nil | Nil | Nil |

**Table-IV: STUDENT: TEACHER RATIO ( PROGRAM-WISE)**

**Name of Engineering Program: BSc Civil Engineering**

|  |  |  |
| --- | --- | --- |
| A. | Total Students currently enrolled in the engineering Program | 258 |
| B. | Total full time dedicated Engineering faculty members | 7 |
|  | Student : Teacher Ratio [A:B] | 36.85:1 |

**Table-V: FACULTY DETAILS RATIO (PROGRAM-WISE)**

**Name of Engineering Program: BSc Civil Engineering**

| **Sr. No.** | **Name** | **PEC #** | **Designation** | **Joining Date** | **Details of Qualifications** | **Specialization** | **Experience Teaching (Total) Years** | **Dedicated / Shared** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|
| **Degree** | **Year** | **Institution** | **Teaching** | **Total** |
| 1 | Dr. Syed Iftikhar Ahmed | Civil / 25043 | Assistant Professor & IOD | 1-10-2013 | B.Sc. Engg. | 2004 | UET Lahore | Civil Engg. | 9.5 | 12.5 | Dedicated |
| M.Sc. Engg. | 2008 | UET Lahore | Hydraulic Engg. |
| Ph.D Engg. | 2011 | The Univ of Tokyo, Japan | Sediment transport |
| 2 | Dr. Anwar-ul-Haq Muneeb | Civil / 359 | Professor | 14-06-2011 | B.Sc. Engg. | 1975 | UET Lahore | Civil Engg. | 26.5 | 26.5 | Dedicated |
| M.Sc. Engg. | 1980 | METU-Turkey | Civil Engg. |
| Ph.D. Engg.Sci. | 1990 | METU-Turkey | Structural Mechanics |
| 3 | Dr. Syed Yasir Alam | Civil / 24158 | Assistant Professor | 6-8-2012 | B.Sc. Engg. | 2004 | UET Lahore | Civil Engg. | 9 | 9 | Dedicated **(On leave)** |
| M.Sc. Engg. | 2007 | Univ de Marne-la-Vallee, France | Civil Engg. |
| Ph.D Engg. | 2011 | Ecole Centrale de Nantes, France | Structural Engg. |
| 4 | Dr. Muazzam Ghous Sohail | Civil / 25686 | Assistant Professor | 27-09-2013 | B.Sc. Engg. | 2006 | UET Lahore | Civil Engg. | 1.5 | 8.5 | Dedicated |
| M.Sc. Engg. | 2009 | INSA de Toulouse, France | Concrete Engg. |
| Ph.D Engg. | 2013 | Univ of Toulouse, France | Concrete Engg. |
| 5 | Dr. Muhammad Ashraf Javid | Civil / 26955 | Assistant Professor | 1-1-2014 | B.Sc. Engg. | 2007 | UET Lahore | Civil Engg. | 7 | 7 | Dedicated |
| M.Sc. Engg. | 2009 | UET Lahore | Transportation Engg. |
| Ph.D Engg. | 2013 | Yokohama National University, Japan. | Transportation Engg. |
| 6 | Dr. Fawad Muzaffar | Civil / 21481 | Assistant Professor | 6-1-2014 | B.Sc. Engg. | 2000 | UET Lahore, | Civil Engg. | 2.5 | 13.5 | Dedicated |
| M.Sc. Engg. | 2006 | Sandford Univ, USA,  | Structural Engg. |
| Ph.D Engg. | 2012 | Sandford Univ, USA | Structural Engg. |
| 7 | Engr. M Farhan Arooj | Civil/ 21747 | Assistant Professor | 3-6-2014 | B.Sc. Engg. | 2001 | UET Lahore | Civil Engg. | 1.5 | 11.5 | Dedicated |
| M.Sc. Engg. | 2004 | KAIST University, Korea | Environmental Engineering |
| 8 | Engr. Irfan Khalid | Civil / 27973 | Lecturer | 21-02-12 | B.Sc. Engg. | 2008 | UET Lahore | Civil Engg. | 3 | 6 | Dedicated |
| M.Sc. Engg. | 2013 | UET Lahore | Geotechnical Engg. |
| 9 | Engr. Nauman Raza | Civil / 32740 | Lab. Engineer | 9-8-2012 | B.Sc. Engg. | 2012 | UET Lahore | Civil Engg. | 2 | 2 | Dedicated |
| M.Sc. Engg. | In progress | UET Lahore | Structural Engg. |
| 10 | Engr. Liaqat Ali | Applied for | Lab. Engineer | 6-8-2013 | B.Sc. Engg. | 2013 | UET Lahore | Civil Engg. | 1 year  | 1 year | Dedicated |
|
| 11 | Engr. Saddy Ahmed | Civil / 34684 | Lab. Engineer | 5-8-2013 | B.Sc. Engg. | 2013 | UET Lahore | Civil Engg. | 1 year  | 1 year | Dedicated |
| M.Sc. Engg. | In progress | UET Lahore | Geotechnical Engg. |
| 12 | Engr. Anum Hashmi | Applied for | Lab. Engineer | 1-10-2014 | B.Sc. Engg. | 2014 | UET Lahore | Civil Engg. | Nil | Nil | Dedicated |
| 13 | Engr. Burhan Ahmad | Applied for | Lab. Engineer | 1-10-2014 | B.Sc. Engg. | 2014 | UET Lahore | Civil Engg. | Nil | Nil | Dedicated |
| 14 | Engr. Irfan Ali | Applied for | Lab. Engineer | 2-10-2014 | B.Sc. Engg. | 2014 | Sir Syed Uni of Engg. And Technology | Civil Engg. | 1 year | 1 year | Dedicated |
| MSc. Engg | In Progress | FAST-NU | Structural Engg. |

**Table-VI: LABORTARY DETAILS (PROGRAM-WISE)**

**Name of Engineering Program: BSc Civil Engineering**

Number of Total Engineering + Computing Courses: 27

Number of Lab Courses: 25

Number of Laboratories: 12 (1, EE + 11, Civil)

| **S #** |  **Name of Laboratory (Staff Names--Qualifications)** | **Lab(s) of Course(s) Conducted in the Lab.** |  **Type(s) of Workstations  (No. of each type)** | **Nature of Experiments** |  **No. of WorkStation** |
| --- | --- | --- | --- | --- | --- |
|
| 1 | **Hydrology and Hydraulics Lab**1. Ms. Lab Engr. Anum Hashmi, BSc (Civil)2. Mr. Lab. Asst M Shoaib Hassan Bhatti, DAE (Civil) | 1- Hydrology and Water Resources Management2- Hydraulics & Irrigation Engineering  | 1- Permeability Apparatus (1) | Demonstration | 4 to 5 |
| 2- Sediment Flow Channel (1) | Demonstration | 4 to 5 |
| 3- Ground water Flow Apparatus (1) | Demonstration | 4 to 5 |
| 4- Basic Hydrology Apparatus (1) | Demonstration | 4 to 5 |
| 2 | **Geotechnical Engineering Lab**1. Mr. Lab Engr. Irfan Ali, BSc (Civil)2. Mr. Lab. Asst Nouman Khalid, DAE (Civil)  | 1- Soil Mechanics-I 2- Soil Mechanics-II 3- Geotechnical and Foundation Engineering 4- Highway and Traffic Engineering | 1- Speedy Moisture (4)  | Demonstration | 4 to 5 |
| 2- Specific Gravity (10) | Demonstration | 4 to 5 |
| 3- Liquid Limit Apparatus (10) | Demonstration | 4 to 5 |
| 4- Plastic Limit Apparatus (10) | Demonstration | 4 to 5 |
| 5- Standard Proctor Apparatus (5) | Demonstration | 4 to 5 |
| 6- Modified Proctor Apparatus (5) | Demonstration | 4 to 5 |
| 7- Digital Penetrometer (1) | Demonstration | 4 to 5 |
| 8- Core Cutter (10) | Demonstration | 4 to 5 |
| 9- Sand Replacement (10)  | Demonstration | 4 to 5 |
| 10- CBR Test (2) | Demonstration | 4 to 5 |
| 11- Different size of Sieves | Demonstration | 4 to 5 |
| 12- Consolidation Test Apparatus (1) | Demonstration | 4 to 5 |
| 13- Direct Sheet Test Apparatus (1) | Demonstration | 4 to 5 |
| 14- Constant Head Permeameter Test Apparatus (1) | Demonstration | 4 to 5 |
| 15- Mechanical Sieve Shaker (1) | Demonstration | 4 to 5 |
| 16- Drying Oven (1) | Demonstration | 4 to 5 |
| 17- Soil Prospecting Kit (2) | Demonstration | 4 to 5 |
| 18- Electronic Balance (5) | Demonstration | 4 to 5 |
| 19- Triaxial Load Frame (1) | Demonstration | 4 to 5 |
| 20- Hydrometer Analysis Apparatus (1) | Demonstration | 4 to 5 |
| 21- Hot Plate (1) | Demonstration | 4 to 5 |
| 22- Hydraulic Jack (4) | Demonstration | 4 to 5 |
| 23- Shovel (4) | Demonstration | 4 to 5 |
| 24- Pick Axe (4) | Demonstration | 4 to 5 |
| 25- SPT Apparatus (1) | Demonstration | 5 to 5 |
| 3 | **Fluid Mechanics Lab** 1. Mr. Lab Engr. Nauman Raza, BSc (Civil) 2. Mr. Lab. Asst Imran Haider, DAE (Civil)  | 1- Fluid Mechanics 2- Advanced Fluid Mechanics 3- Hydraulics and Irrigation Engineering | 1- 5 Meter Flow Channel (1) | Demonstration | 8 to 10 |
| 2- Franceis Turbine (1) | Demonstration | 4 to 5 |
| 3- Pelton Turbine (1) | Demonstration | 4 to 5 |
| 4- Venturi Meter (1) | Demonstration | 4 to 5 |
| 5- Water Hammer Apparatus (1) | Demonstration | 4 to 5 |
| 6- Pressure Measurement Apparatus (1) | Demonstration | 4 to 5 |
| 7- Hydraulic Bench (3) | Demonstration | 4 to 5 |
| 8- Fluid Friction Apparatus (1) | Demonstration | 8 to 10 |
| 9- Piezo Meter (1) | Demonstration | 4 to 5 |
| 10- Orifice Free Jet Flow Apparatus (1) | Demonstration | 4 to 5 |
| 11- Vortex Apparatus (1) | Demonstration | 4 to 5 |
| 12- Impact Of Jet Apparatus (1) | Demonstration | 4 to 5 |
| 13- Renold's Number Apparatus (1) | Demonstration | 4 to 5 |
| 14- Cetrefugal Pump (1) | Demonstration | 4 to 5 |
| 15- Stability of Floating Body Apparatus | Demonstration | 5 to 5 |
| 16- Positive Displacement Pump (1) | Demonstration | 4 to 5 |
| 17- Centre of Pressure Apparatus (1) | Demonstration | 4 to 5 |
| 4 | **Surveying Lab** 1. Vacant2. Mr. Lab. Asst. M Shoaib, DAE (Civil)  | 1- Engineering Surveying 2- Advanced Engineering Surveying | 1- Total Station (5) | Demonstration | 7 to 8 |
| 2- Digital Theodolite (5) | Demonstration | 7 to 8 |
| 3- Auto Level (10) | Demonstration | 4 to 5 |
| 4- Plane Table (10) | Demonstration | 4 to 5 |
| 5- Truff Compas (10) | Demonstration | 4 to 5 |
| 6- Prismatic Compas (10) | Demonstration | 4 to 5 |
| 7- G P S (2) | Demonstration | 9 to 10 |
| 8- Ranging Rod (30) | Demonstration | 7 to 8 |
| 9- Long Peg (100) | Demonstration | 4 to 5 |
| 10- Chaines (15) | Demonstration | 4 to 5 |
| 11- Small Peg (100) | Demonstration | 4 to 5 |
| 12- Staff Meter (10) | Demonstration | 4 to 5 |
| 13- Hammar (5) | Demonstration | 4 to 5 |
| 14- Steel Tape (9) | Demonstration | 4 to 5 |
| 15- Fiber Tape (15) | Demonstration | 4 to 5 |
| 16- Scale & Tap Measurement (10) | Demonstration | 4 to 5 |
| 17- Sprit Level (10) | Demonstration | 4 to 5 |
| 18- Pocket Compas (2) | Demonstration | 4 to 5 |
| 5 | **Strength of Material Lab**1. Mr. Lab Engr. Nauman Raza, BSc (Civil)2. Mr. Lab Engr. Burhan Ahmed, BSc (Civil)3. Mr. Lab. Asst. Amir Waqas, DAE (Civil)  | 1- Plain & Reinforced Concrete -I2- Plain & Reinforced Concrete -II  | 1- Universal Testing Machine (UTM) | Demonstration | 8 to 10 |
| 2- Torsion Machine | Demonstration | 6 to 8 |
| 3- Los Angeles Abrasion Machine | Demonstration | 4 to 6 |
| 4- Charpy Impact testing Machine | Demonstration | 4 to 6 |
| 6 | **Computer Lab**This lab is operated by the shared faculty from Computer Science Department.  | 1- Introduction to Computer Science2- Civil Engineering Drawing & Graphics 3- Highway and Traffic Engineering4- Quantity Surveying & Estimation5- Construction Management 6- Plain and Reinforced Concrete-II7- Probability and Statistics | **Core 2 Due Computers = 53 Nos**  | This lab is used to introduce students about various software’s related to different courses of civil engineering. | 1 |
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| 7 | **Drawing Lab**1. Mr. Draftsman, M Usman2. Mr. Draftsman, T. Chand3. Mr. Lab. Asst. M Adnan Sarwar, DAE (Civil) | 1- Engineering Drawing 2- Civil Engineering Drawing & Graphics 3- Engineering Surveying 4- Advanced Engineering Surveying5- Steel Structures | **Drawing Tables =** 50 | Hands on | 1 |
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| 8 | **Highway & Transportation Engineering Lab**1. Mr. Lab Engr. Liaqat Ali, BSc (Civil)2. Mr. Lab. Asst. Tayyab Ijaz, DAE (Civil) | 1- Highway & traffic Engineering  | 1- Ductility Test Apparatus (1) | Demonstration | 4 to 5 |
| 2- Cleave land Cup Apparatus (1) | Demonstration | 4 to 5 |
| 3- Ring & Ball Test Apparatus (1) | Demonstration | 4 to 5 |
| 4- Engler Viscometer Apparatus (1) | Demonstration | 4 to 5 |
| 5- Saybolt Viscometer Apparatus (1) | Demonstration | 4 to 5 |
| 6- Bacon Sampler Apparatus (1) | Demonstration | 4 to 5 |
| 7- Skid Resistance Tester (1) | Demonstration | 4 to 5 |
| 8- Pycnometer Apparatus (1) | Demonstration | 4 to 5 |
| 9- Marshall Test Apparatus (1) | Demonstration | 4 to 5 |
| 10- Digital Oven (1) | Demonstration | 4 to 5 |
| 11- Flakiness Gauge (2) | Demonstration | 4 to 5 |
| 12- Length Gauge (2) | Demonstration | 4 to 5 |
| 13- Penetrometer (1) | Demonstration | 4 to 5 |
| 9 | **Material Lab**1. Mr. Lab Engr. Saddy Ahmad, BSc (Civil)2. Mr. Lab. Asst. Zareen Khan, DAE (Civil) | 1- Civil Engineering Material2- Plane Rainforcment Concrete -I 3- Plane Rainforcment Concrete -II | 1- Compretion and Flexure (1) | Demonstration | 4 to 5 |
| 2- V.B consistometer (1) | Demonstration | 3 to 4 |
| 3- Air Entraintment meter (1) | Demonstration | 4 to 5 |
| 4- High Presure Auto Clave with Asseories (1) | Demonstration | 6 to 7 |
| 5- Digital Length Compretor (1)  | Demonstration | 4 to 5 |
| 6- Flakiness Sieves (2 sets) | Demonstration | 4 to 5 |
| 7- Thickness Gauge (2 gauges) | Demonstration | 4 to 5 |
| 8- Specific Gravity Operatus (1) | Demonstration | 4 to 5 |
| 9- Curing Tank (1) | Demonstration | 4 to 5 |
| 10- Concrete Mixer (1) | Demonstration | 4 to 5 |
| 11- Concrete Flow Table (1) | Demonstration | 4 to 5 |
| 12- Vibrating Table (1) | Demonstration | 4 to 5 |
| 13- Panetrometer (2) | Demonstration | 4 to 5 |
| 14- Rebound Hammer (2) | Demonstration | 4 to 5 |
| 15- Ultrasonic Pulse Velocity Tester (1) | Demonstration | 4 to 5 |
| 16- Crushing Value Apparatus (4) | Demonstration | 4 to 5 |
| 17- Impact value apparatus (2) | Demonstration | 4 to 5 |
| 18- Balance with capacity 500 kg (1) | Demonstration | 4 to 5 |
| 19- Slump Con with Component (3) | Demonstration | 4 to 5 |
| 20- Beam Cube 9" x 9" 24" (10) | Demonstration | 4 to 5 |
| 21- Beam Prisms 6" x6"x18" | Demonstration | 4 to 5 |
| 22- Cube 6"x6"x6" (20) | Demonstration | 4 to 5 |
| 23- Cube 4"x4"x4" (20) | Demonstration | 4 to 5 |
| 24- Cylinder 6in dia x H12" (20) | Demonstration | 4 to 5 |
| 25- Poker Vibrator (2) | Demonstration | 4 to 5 |
| 26- Vicat Apparatus with Accessories (3) | Demonstration | 4 to 5 |
| 27- Moter Mixer (1) | Demonstration | 4 to 5 |
| 28- Impact Value Apparatus (4) | Demonstration | 4 to 5 |
| 29- li-Chatlier Bar with Component (1) | Demonstration | 4 to 5 |
| 30- Capping Operatus (1) | Demonstration | 4 to 5 |
| 31- Showl (4) | Demonstration | 4 to 5 |
| 32- Microscope (1) | Demonstration | 4 to 5 |
| 33- Vernier Caliper (4) | Demonstration | 4 to 5 |
| 34- Minimum & Maximum Temperature Reader (3) | Demonstration | 4 to 5 |
| 35- Stop Watch (3) | Demonstration | 4 to 5 |
| 36- Screw Gage (2) | Demonstration | 4 to 5 |
| 37- Steel Pans (12) | Demonstration | 4 to 5 |
| 10 | **Engineering Mechanics Lab**1. Mr. Lab Engr. Burhan Ahmad, BSc (Civil)2. Mr. Lab. Asst. Amir Waqas, DAE (Civil) | 1- Engineering Mechanics | 1- Principles of Movements Apparatus (1) | Demonstration | 4 to 5 |
| 2- Center of Gravity Apparatus (1) | Demonstration | 4 to 5 |
| 3- JIB Crane Apparatus (1) | Demonstration | 4 to 5 |
| 4- Flywheel Apparatus (1) | Demonstration | 4 to 5 |
| 5- Friction Apparatus (1) | Demonstration | 4 to 5 |
| 6- Beam Loading Apparatus (1) | Demonstration | 4 to 5 |
| 7- Hanging Rope Loaded Apparatus (1) | Demonstration | 4 to 5 |
| 11 | **Environmental Engineering Lab** | 1- Environmental Engineering-I2- Environmental Engineering-II | **In the process of development** |
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