

Minutes of the Meeting

18 Meeting of Faculty Research Committee (FRC)

held on

**23 February 2023
Through VLC**



Faculty of Engineering Sciences

Table of Contents

Reference Designators & Terms	1
Acronyms & Abbreviations.....	2
Confirmation of the Minutes of 17 th FRCM held on 05 October 2022	4
New Items (15) 5	
Item No. 1801: Appointment of Examiners for MS Thesis Defense	5
Item No. 1802: Appointment of Examiners for PhD Proposal Defense	5
Item No. 1803: Inclusion of Experts in the list of Local External Examiners	6
Item No. 1804: Inclusion of Experts in the List of Foreign Evaluators	6
Item No. 1805: Recommendation of Foreign Evaluators for PhD Candidates	7
Item No. 1806: Appointment of Supervisors and Advisory Committees of PhD Scholars.....	7
Item No. 1807: Recommendation of Examiners for PhD Final Thesis Defense (FTD).....	8
Item No. 1808: Extension in Time Bar of PhD Scholars.....	8
Item No. 1809: Change of Supervisor/Co-Supervisor: PhD Scholars	10
Item No. 1810: Change in the Title of PhD Thesis – PhD Scholar	10
Item No. 1811: Change of Supervisor MSCS.....	11
Item No. 1812: Change of Internal Examiner MSDS	12
Item No. 1813: Change of Thesis Title of MS SE Student	13
Item No. 1814: Signing MOU with the industrial partners – SE Department, KC.....	13
Item No. 1815: Appointment of Examiners for PhD Comprehensive Exams	14
Closing of the Meeting	15
Annex's 16	
Annex-I Appointment of Examiners for MS Thesis Defense	16
Annex-II: Appointment of Examiners for PhD Proposal Defense	31
Annex-III a: Inclusion of Experts in the list of Local External Examiners for MS	32
Annex-III b: Inclusion of Experts in the list of Local External Examiners for MS &PhD	34
Annex-IV: Inclusion of Experts in the List of Foreign Evaluators	35
Annex-V: Recommendation of Foreign Evaluators for PhD Candidates	38
Annex-VI: Appointment of Supervisors & Advisory Committees.....	40
Annex-VII: Recommendation of Examiners for PhD Final Thesis Defense (FTD)	42
Annex-VIII: Extension in Time Bar of PhD Scholars.....	45
Annex-IX: Appointment of Examiners for PhD Comprehensive Exams	46

Reference Designators & Terms

These designators/terms are meant to introduce clarity, standardization and ease of reference while consulting or referring to this document.

Item Number	<u>Item oonn</u> Where oo = ordinal sequence of FRC Meeting nn= serial number of item in that FRC Meeting Example: Item 1712 means Item No. 12 of 17 FRC Meeting
Decision on a New Item	<u>Decision oonn</u> Example: Decision 1712 means Decision on Item 1712 Example: Decision 1712.b means Decision 1712, Clause 'b' Example: Decision 1712.b.2 means Decision 1712, Clause 'b', sub-clause '2'
Decision on a Previous Item	<u>Decision o₂ (oonn)</u> Example: Decision 17 (1512) means decision taken by 17 FRC Meeting on the prevision review item 1512 Example: Decision 17 (1512) b means decision taken by 17 FRC Meeting on the prevision review item 1512 clause 'b' Example: Decision 17 (1512) b.3 means decision taken by 17 FRC Meeting on the prevision review item 1512 clause 'b' sub clause '3'
Action	Authority, Entity, Official, Person, Unit, Dept, Office, etc. required to implement the decision
Responsibility	The supra single Authority, Entity, Official, Person, etc required to: <ol style="list-style-type: none">Coordinate the actions taken by the Authorities, Entities, Officials, Persons, Units, Depts., Offices listed against the actionReport to the Council the progress on the matter, through periodic progress reports and at the meeting of the Council.Be overall responsible to the Competent Authority, and the Council, for the case/issue/point/item he or she has been made responsible for.
Deadlines	Any time period deadlines shall count from the date of issue of the minutes. Time period in days shall imply working days.

Acronyms & Abbreviations

Insert List of Acronyms & Abbreviations used in this document.

Bahria University Head Office		
1.	Dr. Atif Raza Jafri _____	Dean ES Chair
Bahria University Islamabad Campus		
2.	_ Dr. Shahzad Hassan _____	HoD CE Dept. Member
3.	_ Dr. Arif ur Rahman _____	HoD CS Dept. Member
4.	_ Dr. Junaid Imtiaz _____	HoD, EE Dept. Member
5.	_ Dr. Said Akbar Khan _____	HoD EES Dept. Member
6.	_ Dr. Awais Majeed _____	HoD SE Dept. Member
7.	_ Dr. Muhsan Ehsan _____	Ass. Prof. EES Dept. Secretary
Bahria University Karachi Campus		
8.	__ Dr. Sohaib Ahmed _____	Principal BSEAS Member
9.	__ Dr. Syed Safdar Ali _____	HoD CS Dept. Member
10.	__ Dr. Mukesh Kumar Maheshwari ____	HoD EE Dept. Member
11.	__ Dr. Salma Hamza ____	HoD EES Dept. Member
12.	__ Dr. Osama Rehman ____	HoD SE Dept. Member
Bahria University Lahore Campus		
13.	_ Dr. Khawaja Qasim Maqbool ____	HoD CS Dept. Member

Proceedings

1. The proceedings commenced at 9.30 hrs on 23 February 2023 with recitation of few verses from the Holy Quran and Darood Shareef ﷺ.

Opening Remarks

2. Chair FRC welcomed the participants at the three campuses.

Confirmation of the Minutes of 17th FRCM held on 05 October 2022

3. After soliciting the approval of the Chairperson FRC, the Minutes of the 17th FRC were communicated to all members and non-member participants.

New Items (15)

Item No. 1801: Appointment of Examiners for MS Thesis Defense

Sponsor: **HoDs**

Referral Authority: **DRC**

Summary of the Case:

4. Selection of the Internal and External Examiners for MS thesis students of Faculty of Engineering Sciences as recommended by respective DRCs.

Discussion:

5. HoDs from the respective departments of Faculty of Engineering Sciences presented the cases of MS students who have completed their research work and submitted their theses for evaluation. FRC was requested to appoint internal and external examiners for the MS thesis defense of the presented candidates.

Decision 1801:

6. Following decisions were undertaken by FRC:
7. On recommendation of the respective DRCs, FRC appointed panels of examiners for the final MS thesis defense of the presented candidates. Details of the candidates and the approved examiners are listed in **Annex-I**.

Action Required	Action By	Responsibility
Implementation of Decision – a	PGP Coordinators	Concerned HoDs

8. *Point Dropped.*

Item No. 1802: Appointment of Examiners for PhD Proposal Defense

Sponsor: **HoDs**

Referral Authority: **DRC**

Summary of the Case:

9. Selection of the Internal and External Examiners for PhD Proposal Defense of Faculty of Engineering Sciences as recommended by respective DRCs.

Discussion:

10. Candidates listed in **Annex II** and enrolled in PhD programs have cleared their comprehensive exam and are ready to appear for the PhD proposal defense. FRC was requested to appoint appropriate panels of examiners to conduct the PhD proposal defense of the candidates.

Decision 1802:

11. Following decisions were undertaken by FRC:
 - a. On recommendations of the respective DRCs, FRC appointed panels of examiners to conduct the PhD Proposal Defense of the presented candidates. The approved examination panels are listed in **Annex II**. Departments were instructed to ensure that the proposal defense is carried out within the time frame in accordance with the PhD Rules.

Action Required	Action By	Responsibility
Implementation of Decision – a	PGP Coordinators	Concerned HoDs

12. Point Dropped.

Item No. 1803: Inclusion of Experts in the list of Local External Examiners

Sponsor: **HoDs**

Referral Authority: **DRC**

Summary of the Case:

13. Inclusion of Experts in the list of Local External Examiners of Faculty of Engineering Sciences as recommended by respective DRCs.

Discussion:

14. Profiles of active researchers in various peer universities/organizations were presented to the FRC for inclusion in the pool of local external examiners to evaluate MS/PhD theses.

Decision 1803:

15. Following decisions were undertaken by FRC:

- a. FRC approved the examiners listed in **Annex III a** for MS for inclusion in the pool of local external examiners.
- b. The FRC has approved the examiners listed in **Annex III b** for both MS and PhD programs to be included in the pool of local external examiners. The list of PhD examiners will be submitted for approval in the next HERC meeting.

Action Required	Action By	Responsibility
Implementation of Decision – a	PGP Coordinators	Concerned HoDs
Implementation of Decision – b	Dean ES	Dean ES

16. Point Dropped.

Item No. 1804: Inclusion of Experts in the List of Foreign Evaluators

Sponsor: **HoDs**

Referral Authority: **DRC**

Summary of the Case:

17. Inclusion of Experts in the List of Foreign Evaluators of Faculty of Engineering Sciences as recommended by respective DRCs.

Discussion:

18. Profiles of various international researchers were presented for recommendation to the HERC to include them in the pool of foreign evaluators to review PhD theses.

Decision 1804:

19. Following decisions were undertaken by FRC:

- a. FRC approved the profiles of the presented researchers for recommendation to the HERC to include them in the pool of foreign evaluators. Profile summaries of the experts are presented in **Annex IV**.

Action Required	Action By	Responsibility
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Implementation of Decision – a	PGP Coordinators	Concerned HoDs
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20. Point Dropped.

Item No. 1805: Recommendation of Foreign Evaluators for PhD Candidates		
Sponsor: HoDs	Referral Authority: DRC	

Summary of the Case:

21. Recommendation of Foreign Evaluators for PhD Candidates of Faculty of Engineering Sciences as recommended by respective DRCs.

Discussion:

22. Cases of PhD scholars listed in **Annex-V** were presented and FRC was requested to provide recommendation of foreign evaluators for subsequent evaluation of the thesis.

Decision 1805:

23. Following decisions were undertaken by FRC:

- a. On recommendation of the respective DRCs, FRC provided its recommendation for the foreign evaluation of the PhD theses of the presented candidates. Details of candidates and the recommended evaluators are listed in **Annex-V**.

Action Required	Action By	Responsibility
Implementation of Decision – a	PGP Coordinators	Concerned HoDs

24. Point Dropped.

Item No. 1806: Appointment of Supervisors and Advisory Committees of PhD Scholars		
Sponsor: HoDs	Referral Authority: DRC	

Summary of the Case:

25. Recommendation of Supervisors and Advisory Committees for PhD Candidates of Faculty of Engineering Sciences as recommended by respective DRCs.

26. HoD, CS, BUKC presents the case of Dr. Kahif Hussain Talpur was Co-Supervisor and Advisory committee member of PhD Scholars Ms. Darakhshan Syed (02-284212-001) at CS, BUKC. Dr. Kashif Hussain Talpur resigned from Bahria University. As per DRC suggestion Dr. Osama Rehman will be a member of the Advisory Committee of PhD Candidate.

27. Discussion:

28. Cases of PhD scholars in various departments of ES were presented for appointment of supervisors and advisory committees. In some cases, the advisory committees were reconstituted due to non-availability of the members in the committee.

Decision 1806:

29. Following decisions were undertaken by FRC:

- a. On recommendations of the respective DRCs, FRC approved the appointment of supervisors and advisory committees of the presented candidates. The details of candidates and appointment are listed in **Annex-VI**.
- b. FRC approved Dr. Osama Rehman as an advisory committee member of Ms. Darakhshan Syed (02-284212-001).

Action Required	Action By	Responsibility
Implementation of Decision – a	PGP Coordinators	Concerned HoDs

30. Point Dropped.

Item No. 1807: Recommendation of Examiners for PhD Final Thesis Defense (FTD)

Sponsor: **HoDs**

Referral Authority: **DRC**

Summary of the Case:

31. Recommendation of Examiners for PhD Final Thesis Defense (FTD) for PhD Candidates of Faculty of Engineering Sciences as recommended by respective DRCs.

Discussion:

32. Cases of PhD scholars listed in **Annex-VII** were presented and FRC was requested to provide recommendation of examiners for the final thesis defense of the candidates.

33. HoD of EES at BUIC presents the case of Mr. Muhammad Raiees Amjad (01-286162-001) to the FTD examiners and informs the FRC that one examiner of ITD, Dr. Ali Wahid, is not available for the FTD examination. He will be replaced by Dr. Muhammad Irfan Ehsan.

34. HoD of SE at BUIC presents the case of Mr. Zulfiqar Ali (01-281151-001) to the FTD examiners and requested the ratification of examiners.

Decision 1807:

35. Following decisions were undertaken by FRC:

- a. On recommendation of the respective DRCs, FRC provided its recommendation of the FTD examiners for PhD theses of the presented candidates. Details of candidates and the recommended examiners are listed in **Annex-VII**.

Action Required	Action By	Responsibility
Implementation of Decision – a	PGP Coordinators	Concerned HoDs

36. Point Dropped.

Item No. 1808: Extension in Time Bar of PhD Scholars

Sponsor: **HoDs**

Referral Authority: **DRC**

Summary of the Case:

37. Recommendation of Extension in Time Bar of PhD Scholars of Faculty of Engineering Sciences as recommended by respective DRCs.

Discussion:

38. HoD, EES, BUKC present the case of PhD scholar Shaista Mahmud (02-283161-003) has published a research article from her thesis in an X-category Impact Factor journal. She has fulfilled all mandatory requirements and submitted her thesis draft for foreign evaluation. The scholar has applied for 1-year extension to complete their Foreign Evaluation and Final Thesis defense. In this regard, the case is presented in front of the Respected FRC Chair. The department/ DRC committee was requested to recommend a one-year further extension in the program duration to the Honorable Rector.
39. HoD, EES, BUKC present the case of PhD scholar (Geophysics) Muhammad Irfan (02-283161-004) has published a research article from his thesis in an X-Category Journal. He has successfully defended his ITD and his compliance report has been endorsed by Dean ES and Pro Rector-RIC. The scholar has applied for 1-year extension to complete their Foreign Evaluation and Final Thesis defense. In this regard, the case is presented in front of the Respected FRC Chair. The department/ DRC committee was requested to recommend a one-year further extension in the program duration to the Honorable Rector.
40. HoD, EES, BUKC present the case of PhD (ES) scholar Arjan Das (02-282171-001) completed his 6 years in Fall 2022. His thesis was submitted to the department for ITD. According to his supervisor, he has submitted his mandatory research paper to an X- Category journal. The Scholar has submitted the application for the one-year time bar extension.
41. HoD, EE, BUIC present the case of Maryam Iqbal Shah Taizi (01-281171-003) has successfully submitted thesis for ITD dated 19/01/2023 via PGP Thesis Management System. With the end of Spring 2022, her 6 years of PhD will be completed. She has requested her 1st extension for 7th year via form PhD-04. Her thesis has been sent for local evaluation on 25/01/2023.
42. HoD, EE, BUKC present the case of Engr. Arshee Ahmed Tanveer (02-281171-001) is enrolled as Ph.D. scholar in Spring 2017. The candidate has completed the publication requirement for the award of Ph.D. degree and has submitted the thesis for internal defense. Ms. Arshee's six years are going to be completed in Spring 2023 and have requested an extension of one year.
43. HoD, CS, BUKC present the case of Ms. Fasiha Ikram (02-284171-001) has completed six years of PhD studies. Her thesis submitted to the department for the ITD. She has completed degree requirement by publishing 01 Impact Factor Journals in X category. The student requested for 01-year extension from FRC to complete her PhD studies.
44. HoD, CE, BUIC present the cases of Ms. Zahra Waheed Awan (01-281171-006) and Ms. Amna Waheed Awan (01-281171-005) are enrolled in PhD (CE) program. The candidates have completed the extended program duration of six years in fall 2022. They have applied for an extension of one year. Ms. Zahra Waheed Awan and Ms. Amna Waheed Awan have cleared their Internal Thesis Defence (ITD) on 14th and 15th Feb, 2023 respectively. They have completed the mandatory research paper requirement as well. DRC has recommended one year extension to them so that the subsequent processing of thesis can be carried out.

Decision 1808:

45. Following decisions were undertaken by FRC:

- a. Decisions on the extension cases of presented PhD scholars are summarized in **Annex-VIII.**

Action Required	Action By	Responsibility
Implementation of Decision – a	PGP Coordinators	Concerned HoDs

46. Point Dropped.

Item No. 1809: Change of Supervisor/Co-Supervisor: PhD Scholars

Sponsor: **HoDs**

Referral Authority: **DRC**

Summary of the Case:

47. Recommendation of Change of Supervisor/Co-Supervisor for PhD Scholars of Faculty of Engineering Sciences as recommended by respective DRCs.

Discussion:

48. HoD, CS, BUIC present the case of Mr. Qasim Mehmood (01-284221-001) PhD CS scholar was under supervision of Dr. Imran Ahmed Siddique. Dr. Imran Ahmed Siddique has resigned from university. So, Dr. Sumaira Kausar has given consent to supervise the student with co supervision of Dr. Imran Ahmed Siddique.

49. HoD, EES, BUIC present the case of Mr. Umair Rashad (01-286192-003) PhD ES scholar was under supervision of Dr. Asma Jamil. With mutual consent of supervisor (Dr. Asma Jamil) and scholar requested to change supervisor. So, Dr. Aansa Rukya Saleem has given consent to supervise the student with co supervision of Dr. Tahir Hayat Malik.

50. Decision 1809:

51. Following decisions were undertaken by FRC:

- a. FRC approved the appointment of Dr. Sumaira Kausar as the Principal and Dr. Imran Ahmed Siddique as the co-supervisor of the PhD Scholar Mr. Qasim Mehmood (01-284221-001). Furthermore, Dr. Aansa Rukya Saleem was appointed as the Principal supervisor of PhD scholar Mr. Umair Rashad (01-286192-003).

Action Required	Action By	Responsibility
Implementation of Decision – a	PGP Coordinators	Concerned HoDs

52. Point Dropped.

Item No. 1810: Change in the Title of PhD Thesis – PhD Scholar

Sponsor: **HoD, CS, BUKC**

Referral Authority: **DRC**

Summary of the Case:

53. Recommendation of Change in the Title of PhD Thesis – PhD Scholar of Faculty of Engineering Sciences as recommended by respective DRC.

Discussion:

54. Concerned HoD presented the case of PhD scholar who appeared for the PhD Proposal Defense and the examiners suggested changes in their research titles. Details of student, existing and suggested titles are summarized in the following.

SNo.	Name (Enrolment #)	Program	Supervisor (Co-Supervisor)	Title of Thesis
1	Ms. Naureen Hasan (02-284162-001)	PhD CS	Dr. Safdar Ali Rizvi	Existing: An Improved 5G Radio Resource Management Approach using Clustering Techniques

				Suggested: Interference Managed Hybrid Clustering Techniques to Improve 5G Radio Resource Management
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55. Decision 1810:

56. Following decision was undertaken by FRC:

- a. FRC approved the change of research title of the presented scholars. The approved title and details of students are listed in the following.

SNo.	Name (Enrolment #)	Program	Supervisor (Co-Supervisor)	Title of Thesis
1	Ms. Naureen Hasan (02-284162-001)	PhD	Dr. Safdar Ali Rizvi	Interference Managed Hybrid Clustering Techniques to Improve 5G Radio Resource Management
Action Required			Action By	Responsibility
Implementation of Decision – a			None	None

57. Point Dropped.

Item No. 1811: Change of Supervisor MSCS
Sponsor: HoD CS, IC Referral Authority: DRC

Summary of the Case:

58. Recommendation of Change in Change of Supervisor MSCS of Faculty of Engineering Sciences as recommended by respective DRC approved in 17th FRC.

Discussion:

59. HoD CSIC, presented the case of MS scholar change of supervisor. Details of the student, the existing and suggested Supervisor is summarized in the following.

SNo.	Name (Enrolment #)	Program	Supervisor (Co-Supervisor)	Title of Thesis
1	Shehnaz Bibi 01-243211-011	MSCS	Existing: Dr. Ibrahim Tariq Suggested: Dr. Moazzam Ali (Dr. Moneeb Gohar)	Nature Inspired Routing Protocol for High Speed Networks

60. Decision 1811:

61. Following decision was undertaken by FRC:

- a. FRC approved the in Change of Supervisor MSCS. The approved detail of student is listed in the following.

SNo.	Name (Enrolment #)	Program	Supervisor (Co-Supervisor)	Title of Thesis
1	Shehnaz Bibi 01-243211-011	MSCS	Dr. Moazzam Ali (Dr. Moneeb Gohar)	Nature Inspired Routing Protocol for High-Speed Networks

Action Required	Action By	Responsibility
Implementation of Decision – a	None	None

62. Point Dropped.

Item No. 1812: Change of Internal Examiner MSDS	
Sponsor: HoD CS, IC	Referral Authority: DRC

Summary of the Case:

63. Recommendation of Change of Examiners MSDS of Faculty of Engineering Sciences as recommended by respective DRC.

Discussion:

64. HoD CSIC, presented the case of Change of Internal Examiner MSDS. Details of student, existing and suggested examiners are summarized in the following.

SNo.	Name (Enrolment #)	Program	Supervisor (Co-Supervisor)	Internal Examiner
1	Zain Raza 01-249211-017	MSDS	Dr. Fatima Khalique	Existing: Dr. Momina Moetesum Suggested: Dr. Sumaira Kausar Dr. Sohail Akhter

65. Decision 1812:

66. Following decision was undertaken by FRC:

- a. FRC approved the in Change of Internal Examiner MSDS. The approved details of student is listed in the following.

SNo.	Name (Enrolment #)	Program	Supervisor (Co-Supervisor)	Internal Examiner
1	Zain Raza 01-249211-017	MSDS	Dr. Fatima Khalique	Dr. Sohail Akhter

Action Required	Action By	Responsibility
Implementation of Decision – a	None	None

67. Point Dropped.

Item No. 1813: Change of Thesis Title of MS SE Student	
Sponsor: HoD SE, IC	Referral Authority: DRC

Summary of the Case:

68. Recommendation of Change of Thesis Title of MS SE Student of Faculty of Engineering Sciences as recommended by respective DRC.

Discussion:

69. HoD SE, IC, presented the case of Change of Thesis Title of MS SE Student. Details of student, existing and suggested examiners are summarized in the following.

SNo.	Name (Enrolment #)	Program	Supervisor (Co-Supervisor)	Title of Thesis
1	Sania Kanwal 01-241202-012	MS SE	Dr. Tamim A Khan	Existing: Web Applications Vulnerability Analysis using deep learning. Suggested: Web and Network Applications Vulnerability Analysis using deep learning

70. Decision 1813:

71. Following decision was undertaken by FRC:

- a. FRC approved the in Change of Thesis Title of MS SE Student. The approved details of student are listed in the following.

SNo.	Name (Enrolment #)	Program	Supervisor (Co-Supervisor)	Title of Thesis	Internal Examiner	External Examiner
1	Sania Kanwal 01-241202-012	MS SE	Dr. Tamim A Khan	Web and Network Applications Vulnerability Analysis using deep learning	Dr. Kashif Sultan	Dr. Muddassar Azam Sindhu

Action Required	Action By	Responsibility
Implementation of Decision – a	None	None

72. Point Dropped.

Item No. 1814: Signing MOU with the industrial partners – SE Department, KC	
Sponsor: HoD SE, KC	Referral Authority: DRC

Summary of the Case:

73. Signing MOU with the industrial partners of Faculty of Engineering Sciences as recommended by respective DRC.

Discussion:

74. One of the Corporate Advisory Committee (CAC) members of Department of Software Engineering - BUKC, Mr. Muhammad Umer Khan, CEO Bits Collison, is actively engaged with the department in students mentoring, training and have also provided internships to SE students in several occasions. In the 12th CAC meeting held on the 7th February 2023, Mr. Umer has shown interest in signing an MoU with the Department of Software Engineering. The process would be initiated by the department in the coming few weeks and further reported in the upcoming FRC.

75. Decision 1814:

76. Following decision was undertaken by FRC:

- a. Hod proceed the procedure to sign MOU as per process in practice at BU.

Action Required	Action By	Responsibility
Implementation of Decision – a	HoD	Principal BEASE, BUKC

77. Progress to be Reported

Item No. 1815: Appointment of Examiners for PhD Comprehensive Exams	
Sponsor: HoD CSIC	Referral Authority: DRC

Summary of the Case:

78. Selection of Examiners for PhD Comprehensive Exams of Faculty of Engineering Sciences as recommended by respective DRCs.

Discussion:

79. Cases of PhD scholars (listed in **Annex-IX**) were presented by the HoD CS, BUIC. These students have completed their course work and need to appear for the PhD comprehensive exam. FRC was requested to approve relevant subjects and appoint appropriate examiners for the PhD Comprehensive Exams.

Decision 1815:

80. Following decisions were undertaken by FRC:

- a. On recommendation of the DRC, FRC approved the subjects and examiners for the PhD Comprehensive Exam of the presented candidates. Details of candidates and approved examiners are listed in **Annex-IX**.

Action Required	Action By	Responsibility
Implementation of Decision – a	PGP Coordinators	Concerned HoDs

81. *Point Dropped.*

Closing of the Meeting

82. Chair FRC-ES summarized the key decisions. In his closing remarks, Chair – FRC thanked the members/participants for contributing to the FRC-ES meeting.

83. The meeting concluded at 5.00 hrs.

Dr. Atif Raza Jafri
Dean ES

23 February 2023

Annex's

Annex-I Appointment of Examiners for MS Thesis Defense

Appointment of Examiners for MS Thesis Defense CS Department, Islamabad Campus

S. No	Name (Enrollment #)	Thesis Title	Program	Supervisor (Co- Supervisor)	Internal Examiner	External Examiner
1	Laraib Kaleem 01-249212-005	Text Summarization for Roman Urdu	MS (CS)	Dr. Arif ur Rehman	Dr. Sumaira Kausar	Dr. Amanullah Yasin
2	Muhammad Abubakar Khan 01-249212-007	Logistics Route Optimization using Quantum Computing Approaches	MS (CS)	Dr. Fatima Khalique	Dr. Faisal Bashir	Dr. Kashif Kifayat
3	Usama Bin Tariq 01-249212-016	Spatial Isolation and Quarantine Strategy Optimization using Quantum Annealing	MS (CS)	Dr. Fatima Khalique	Dr. Saba Mahmood	Dr. Irfan ul Haq
4	Talha 01-249212-015	Advance Search Engine for Legal Texted Ordinances	MS (CS)	Dr. Muhammad Asfand-e-yar	Dr. Sohail Akhter	Dr. Sadaf Abdul Rauf
5	Muhammad Muaz Hassan 01-249212-008	Anomaly Detection in Health Insurance Data using Network Analysis	MS (CS)	Dr. Fatima Khalique	Dr. Arif ur Rehman	Dr. Tehmina Amjad
6	Safiullah 01-249212-012	Disease Spatio Temporal Analytics using Attention based Graph Networks	MS (CS)	Dr. Fatima Khalique	Dr. Moazzam Ali	Dr. Fahad Tahir
7	Salman Ahmad Khan 01-249212-013	A Light-Weight deep Learning Approach for Crop Disease Identification	MS (CS)	Dr. Sumaira Kausar	Dr. Fatima Khalique	Dr. Kifayat ullah Khan
8	Mujahid Ahmad 01-249212-009	Text based Personality Recognition based on user's content	MS (CS)	Dr. Muhammad Asfand-e-yar	Dr. Aleeha	Dr. Majid Iqbal Khan

9	Hira Riaz 01-249212-003	Disease Trajectory Mining using Network Analysis	MS (CS)	Dr. Fatima Khalique	Dr. Muhammad Asfand-e-yar	Dr. Kifayat ullah Khan
10	Misbah Zafar 01-249212-006	UDoc QA-Urdu Document-Based Question Answering	MS (CS)	Dr. Arif ur Rehman	Dr. Khurram Ehsan	Dr. Rizwan Bulbul
11	Muneeb Ahmed 01-249212-010	Negative Emotion Recognition using FNIRs based Classification	MS (CS)	Dr. Sumaira Kausar	Dr. Muhammad Asfand e yar	Dr. Labiba Fahad
12	Hashir Maqsood 01-249211-018	Sentiment Analysis for Roman Urdu	MS (CS)	Dr. Muhammed Asfand-e-yar	Dr. Fatima Khalique	Dr. Abdul Basit
13	Muneeb Ahmed Mashwani 01-249211-010	User Polarization based on Social Media Activities	MS (CS)	Dr. Muhammed Asfand-e-yar	Dr. Saba Mahmood	Dr. Tanvir Afzal
14	Sehar Qurashi 01-249202-015	Facial Landmark Detection of High-Resolution Human Images	MS (CS)	Dr. Muhammad Asfand-e-yar	Dr. Sabina Akhtar	Dr. Akhter Jamil
15	Haider Hassan Pasha 01-249212-002	Optimized Energy Consumption Model for multi-source Small Structures	MS (CS)	Dr. Fatima Khalique	Dr. Sabina Akhter	Dr. Sajjad Khan
16	Asfand-e-yar 01-243212-003	Ordinance Categorization and Semantic Modelling	MS (CS)	Dr. Muhammad Asfand-e-yar	Dr. Aleeha Iftikhar	Dr. Akhter Jamil
17	Muhammad Taha Yousaf 01-243212-014	Detection of Sybil Attack in Online Social Networks	MS (CS)	Dr. Saba Mahmood	Dr. Moazzam Ali	Dr. Rabeeh Ayaz
18	Mehreen Tariq 01-243212-019	Land cover and crop classification in satellite images	MS (CS)	Dr. Arif ur Rehman	Dr. Sumaira Kausar	Dr. Asim Munir
19	Anita Ishaq 01-243212-002	Un constrained urdu handwriting Recognition using transformers	MS (CS)	Dr. Arif ur Rehman	Dr. Fatima Khalique	Dr. Asim Munir

20	Muhammad Mutahar Abbas 01-243212-013	Image based PE file detection and classification	MS (CS)	Dr. Faisal Bashir	Dr. Moneeb Gohar	Dr. Muazzam Khattak
21	Anees ur Rehman 01-243221-001	Cricket Match Highlights Generation	MS (CS)	Dr. Sumaira Kausar	Dr. Khurram Ehsan	Dr. Muhammad Nadeem
22	Usman Aziz 01-243212-017	Dynamic Interactions of Drug-food to Analyze the Adverse Effects	MS (CS)	Dr. Muhammed Asfand e Yar	Dr. Arif ur Rehman	Dr. Muhammad Shiraz
23	Danish Ali 01-243212-013	Personality Traits Identification from Texts	MS (CS)	Dr. Arif ur Rehman	Dr. Sohail Akhter	Dr. Zahid Haleem
24	Alina Khalid 01-247212-002	Android Malware and Variant Detection Framework	MS (CS)	Dr. Faisal Bashir	Dr. Moazzam Ali	Dr. Saleem Iqbal
25	Maleeha Mujahid 01-247212-008	Key Provisioning for Enhanced Group Communication in Constrained Application Protocol-based Internet of Things	MS (CS)	Dr. Moneeb Gohar	Dr. Faisal Bashir	Dr. Muhammad Shiraz
26	Ayesha Irfan 01-247212-004	Using Key provisioning for CoAP Group Mobility Management to Secure an Internet of Things in WBAN networks	MS (CS)	Dr. Moneeb Gohar	Dr. Khurram	Dr. Humaira Ashraf
27	Zain Nawaz 01-247212-017	A framework for Enabling Static Detection and Classification of PE Malware	MS (CS)	Dr. Faisal Bashir	Dr. Saba Mahmood	Dr. Saleem Iqbal
28	Amjad Saleem Rana 01-247212-003	A Framework for Evasive Adversarial Example Attack Generation against Android Malware Defense	MS (CS)	Dr. Faisal Bashir	Dr. Sumaira Kausar	Dr. Nazir
29	Zohaib Ali 01-247212-018	A lightweight and secure authentication scheme for smart health scenario	MS (CS)	Dr. Saba Mahmood	Dr. Moneeb Gohar	Dr. Muazzam Khattak

30	Muhammad Ishaque 01-247212-019	An Efficient Backoff Mechanism for UPLINK ODFMA Random Access 802.11ax	MS (CS)	Dr. Moneeb Gohar	Dr. Moazzam Ali	Dr. Sajjad Khan
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Appointment of Examiners for MS Thesis Defense EE Department, Islamabad Campus

S. No	Names (Enrollment #)	Thesis Title	Program	Supervisor (Co-Supervisor)	Internal Examiners	External Examiners
1.	Rizwan Tayyab 01-244212-013	Blockchain Enabled Framework for Transport & Logistics	MS (EE)	Dr. Adil Ali (Engr. Hassan Danish)	Dr. Junaid Imtiaz	Dr. Muhammad Awais
2.	Mohammad Hamza 01-244212-005	An improved Sliding mode control for Grid Connected Inverter	MS (EE)	Engr. Faheem Haroon (Mian Farhan Ullah)	Dr. Asad Waqar	Dr. Intisar Ali Sajjad
3.	Muhammad Danyal Zahid 01-244212-009	Frequency Control of an islanded Micro-Grid using Model Predictive Control (MPC)	MS (EE)	Engr. Umaid Ali	Mudassir Wahab	Dr. Intisar Ali Sajjad
4.	Faiz Ur Rehman 01-244212-001	Autotuning of Weighting factor in hybrid microgrid using Brain Emotional Learning based Approach	MS (EE)	Engr. Umaid Ali	Dr. Asad Waqar	Dr. Muhammad Majid
5.	Muhammad Adnan 01-244212-006	High throughput flexible hardware architecture for AI enabled IDS	MS (EE)	Dr. Atif Raza Jafri (Dr. Imran Siddiqui)	Dr. Imran Fareed	Dr. Muhammad Awais
6.	Muhammad Umair Iqbal 01-244212-011	Performance Analysis of RIS Assisted Heterogeneous Network	MS (EE)	Dr. Adil Ali	Dr. Junaid Imtiaz	Dr. Khurram Javed
7.	Muhammad Mubashir Khalid 01-244212-010	Behavioural Analysis of IoT Network for Future Communication using Machine Learning	MS (EE)	Dr. Junaid Imtiaz	Dr. Adil Ali	Dr. Muhammad Majid

8.	Jawad ul Hassan 01-244242-004	Power Quality Improvement using AI in power system Application	MS (EE)	Dr. Imran Fareed Nizami (Faheem Haroon)	Dr. Saleem Aslam	Dr. Muhammad Majid
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Appointment of Examiners for MS Thesis Defense EES Department, Islamabad Campus

S No.	Name (Enrolment #)	Thesis Title	Program	Supervisor (Co-Supervisor)	Internal Examiner	External Examiner
1	Sajida Hussain 01-262201-008	Determination Of Water Quality Status And Its Health Impacts On Residents Of Selected Area In Gilgit Baltistan, Pakistan	MS (ES)	Dr. Asma Jamil	Dr. Said Akbar Khan	Dr. Waqar un Nisa
2	Asma Ishtiaq 01-262211-009	Determination Of Heavy Metals, Physicochemical And Biological Parameters Of Drinking Water Of Sattelite Town, Rawalpindi	MS (ES)	Dr. Aansa Rukya Saleem	Dr. Asma Jamil	Dr. Nazneen Bangash
3	Umer Kamal 01-262211-020	Sustainability Study Of Micro Hydropower Plants Installed In Mansehera- KPK- Pakistan	MS (ES)	Dr Humera Farah	Dr. Aansa Rukya Saleem	Dr. Hamid Iqbal
4	Aleena Nazir 01-262212-018	Assessment And Removal Of Heavy Metals From Soan River Wastewater Using (Neem) Azadirachta Indica Powder	MS (ES)	Dr. Said Akbar Khan	Dr. Asma Jamil	Dr. Javed Nawab
5	Ali Akbar 01-262212-019	Evaluation of Drinking Water Quality of Different Sources in the Flood Effected Area in Tehsil Gandakha, District Usta Muhammad, Balochistan	MS (ES)	Dr. Said Akbar Khan	Mr. Syed Umair Ullah Jamil	Dr. Said Muhammad
6	Ifra Ahmed Khalil 01-262212-021	Biodegradation of Vulcanised Rubber Using Bacterial Strains Isolated from Open Dumping Site, Islamabad.	MS (ES)	Mr. Syed Umair Ullah Jamil	Dr. Asma Jamil	Dr. Waqar un Nisa
7	Irfan Ullah 01-262212-022	Evaluation Of Drinking and Irrigation Water Quality And Potential Risks Indices In Tehsil Karak, Khyber Pakhtunkhwa, Pakistan	MS (ES)	Dr. Said Akbar Khan	Dr. Humera Farah	Dr. Said Muhammad
8	Javeria Mushtaq 01-262212-023	Removal of Selected heavy metals from Pollutes water by using Zinc Oxide nanoparticles.	MS (ES)	Syed Umair Ullah Jamil	Dr. Said Akbar Khan	Dr. Nazneen Bangash

9	Muhammad Zuhair Asif 01-262212-024	Analysis Of Micro Plastics In Branded And Local Tea, Powderd Milk And Tea Whitner Available In Pakistan	MS (ES)	Ms. Fiza Sarwar	Dr. Aansa Rukya Saleem	Dr. Nazneen Bangash
10	Rifat Un Nisa 01-262212-025	Impact of Pyrogenic Carbon on Root Architecture and Root Exudates Under Drought Stress	MS (ES)	Dr. Aansa Rukya Saleem	Ms. Fiza Sarwar	Dr. Tahir Hayat
11	Aadil Iqbal 01-262212-001	Facies analysis for depositional models of early Cambrian Hazira formation Abbottabad	MS (GEO)	Dr. Mumtaz Ali Khan	Prof. Dr. M. Zafar	Dr. Khalid Latif
12	Abid Ullah 01-262212-002	Microfacies Analysis and Depositional Environment Of Jurassic Sammanasuk Formation, Township Section Abbottabad, Pakistan	MS (GEO)	Dr. Maryam Saleem	Mr. Masood Anwar	Dr. Abbas Ali Naseem
13	Awais Hikmat 01-262212-003	Geochemical Analysis of The Coal In Hangu Formation, Orakzai Agency, Khyber Pakhtunkhwa, Pakistan	MS (GEO)	Prof. Dr. M. Zafar (Mr. Syed Mamoon Siyar)	Mr. Saqib Mehmood	Dr. Abid Ahmad
14	Irfan Ali Shah 01-262212-005	Role Of Plastic Coating Over Mechanical Properties of Mansehra Granite	MS (GEO)	Mr. Masood Anwar	Dr. Mumtaz Ali Khan	Dr. Aqeel Gohar
15	Izaz Hassan 01-262212-006	Geochemical Analysis of Lockhart Limestone for Hydrocarbon Potential in Kotal Section, Kohat Basin, Khyber Pakhtunkhwa, Pakistan	MS (GEO)	Dr. Maryam Saleem	Mr. Saqib Mehmood	Dr. Anees Ahmed Bangash
16	Malik Khayyam Hussain 01-262212-007	3d Seismic Structural Interpretation and Sub-Surface Modeling of Rajian Area, Eastern Potwar Basin, Pakistan	MS (GEO)	Mr. Tausif Ahmad	Dr. Muhsan Ehsan	Mr. Qadeer Ahmad
17	Muhammad Ismail 01-262212-008	Biostratigraphic Setup and Depositional Model of Margalla Hill Limestone, Hazara Basin North West Himalayas, Pakistan	MS (GEO)	Dr. Maryam Saleem	Dr. Mumtaz Ali Khan	Dr. Abbas Ali Naseem

18	Sadik Sharif 01-262212-009	Morphology and genesis of non-skeletal components of Samana Suk Formation, Shah Alla Ditta, Islamabad, Pakistan	MS (GEO)	Dr. Mumtaz Ali Khan	Dr. Maryam Saleem	Dr. Mustafa Yar
19	Saqalain Haider 01-262212-010	An Integrated Approach to Evaluate Sub Surface Ramp Geometries And Their Behaviour In Npdz, Potwar Basin, Pakistan	MS (GEO)	Mr. Tausif Ahmad	Mr. Muhammad Raiees Amjad	Mr. Mujtaba Mehmood Mongat
20	Abdul Basit 01-262212-011	Reservoir Characterization of Sawan Gas Field using Seismic Inversion and Machine Learning Algorithms, Central Indus Basin, Pakistan	MS (GEOPHY)	Dr. M. Fahad Mehmood	Dr. M. Iqbal Hajana	Dr Anees Ahmed Bangash
21	Amber Latif 01-262212-012	Geophysical Characterization & Machine Learning-Based Quantitative Interpretation of Lower-Goru Formation of Kadanwari Block, Middle Indus Basin Pakistan	MS (GEOPHY)	Dr. Muhsan Ehsan (Dr. Khalid Amin Khan)	Dr. M. Fahad Mehmood	Dr. Ali Wahid
22	Hafiz Muhammad Taqi 01-262212-013	Combining Machine Learning and Seismic Inversion Technique for Reservoir Characterization Of Dhodhak Field, Central Indus Basin, Pakistan	MS (GEOPHY)	Dr. M. Fahad Mehmood	Dr. Muhsan Ehsan	Dr. Zulfiqar Ahmad
23	Muhammad Saqib Ur Rehman 01-262212-016	2D Structural Modelling and Reservoir Characterization Using Integrated Data Set Of Seismic And Well, Manzalai Gas Field Kohat Sub- Basin Pakistan	MS (GEOPHY)	Dr. Urooj Shakir	Mr. Muhammad Raiees Amjad	Dr. Ali Wahid
24	Saman Fatima 01-262212-017	3D Seismic Interpretation, Petrophysics And Machine Learning-Based Quantitative Interpretation Of Gambat Latif Block Middle Indus Basin, Pakistan	MS (GEOPHY)	Dr. Muhsan Ehsan (Dr. Khalid Amin Khan)	Dr. Urooj Shakir	Dr. Munawar Shah

Appointment of Examiners for MS Thesis Defense SE Department, Islamabad Campus

S. No	Name (Enrollment #)	Thesis Title	Program	Supervisor (Co- Supervisor)	Internal Examiner	External Examiner
1	Shabana Shahbaz (01-241211-010)	Evaluation of Usability and User-Engagement factors preferable for Mobile games	MS (SE)	Dr. Awais Majeed (Dr. Raja M Suleman)	Dr. Tamim A Khan	Dr. Shariq Hussain
2	Sabia Khan (01-241211-008)	Urdu Topic Modeling using Transformer-based Attention Networks	MS (SE)	Dr. Raja M Suleman	Dr. Kashif Sultan	Dr. Khalid Iqbal
3	Shumail Iftikhar (01-241211-011)	Empirical Evaluation of Large Language Models in Automated Software Requirements Elicitation	MS (SE)	Dr. Raja M Suleman	Dr. Kashif Sultan	Dr. Arslan Shukat
4	Khafsa Ehsan (01-241211-003)	Autism spectrum disorder detection in early ages using automated machine learning.	MS (SE)	Dr. Kashif Sultan	Dr. Sumaira Kausar	Dr. Khalid Iqbal
5	Faiza Asad (01-241212-017)	Value cognizant test case prioritization for regression testing using integration-based test data	MS (SE)	Dr. Tamim A Khan	Dr. Awais Majeed	Dr. Basit Shahzad
6	Saima Akbar (01-241212-008)	Android Malware Detection Using Static features of Mobile Applications.	MS (SE)	Dr. Tamim A Khan (Dr. Adeel M Syed)	Dr. Kashif Sultan	Dr. Muhammad Imran
7	Sidra Urooj (01-241212-012)	Pattern Recognition and Customer Segmentation Using Feature Analysis on Postpaid Fixed Line Telecom Data	MS (SE)	Dr. Tamim A Khan (Dr. Kashif Sultan)	Dr. Adeel M. Syed	Dr. Arslan Shukat
8	Zobia Jabeen Akhtar (01-241212-016)	Business Value-based Requirement for Test Case Prioritization Using Reinforcement Learning	MS (SE)	Dr. Tamim A Khan	Dr. Raja M Suleman	Dr. Basit Shahzad
9	Minahil Rasul (01-246202-005)	Determining the most effective strategies of e-commerce for novice entrepreneurs	MS (EM)	Engr. Bilal Ashraf Awan (Dr Zahoor Sarwar)	Dr. Abdul Baseer	Dr. Murtaza Mir
10	Abdul Rafeh (01-246211-001)	Determining The Major Characteristics Desired By Clients In Buying Electric Vehicles – A Case Study Of Pakistani Automobile Market	MS (EM)	Engr. Bilal Ashraf Awan (Dr Zahoor Sarwar)	Dr. Abdul Baseer Qazi	Dr. Ansir A Rajput

11	Muhammad Haroon Safdar (01-246211-005)	Determining Suitable Technological Trends for Highways and Motorways Construction and Delivery Projects: Case Study of Pakistan	MS (EM)	Engr. Bilal Ashraf Awan (Dr Zahoor Sarwar)	Dr. Abdul Baseer Qazi	Dr. Ansir A Rajput
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Appointment of Examiners for MS Thesis Defense EES Department, Karachi Campus

S. No.	Name (Enrollment #)	Thesis Title	Program	Supervisor (Co-Supervisors)	Internal Examiners	External Evaluators
1	Abdul Rauf Siddiqui 02-262211-001	Assessment of the Effectiveness of Mitigation Measures Proposed in Environmental Assessment Study of Oil & Gas Pipelines	MS (ES)	Mr. Mughal Sharif	Dr. Salma Hamza	Dr. Ahmad Hussain
2.	Ameer Hamza 02-262211-002	Impact of Municipal Solid Waste on Groundwater Quality of Nari & Gaj Formation - A Comparative Analysis	MS (ES)	Mr. Muhammad Irfan	Dr. Zeeshan Ali	Mr. Hammad Manzoor
3.	Muhammad Ammar Murtaza Hashmi 02-262211-004	Urban Land Extraction for Karachi Using the Night-Time Light Data (DMSP-OLS & VIIRS) and Validation by LandSat-8 OLI Data	MS (ES)	Muhammad Irfan	Ms. Shaista Iftikhar	Dr. Muhammad Azam
4.	Nazeer Ahmed 02-262211-006	Generation of Electric Energy through Renewable Energy (Wind) for environment sustainability.	MS (ES)	Muhammad Irfan	Mr. Mughal Sharif	Dr. Mehmood Ali
5.	Syed Khizar Askari 02-262211-007	Assessment of Temporal and Spatial Variation of Mangroves in Hawksbay-Manora Coast Karachi Pakistan	MS (ES)	Mr. Mughal Sharif	Mr. Muhammad Irfan	Dr. Shah Ali Ul Qader
6.	Ms. Uroosa Sheikh 02-262211-008	Acacia nilotica (L.) Willd. ex Del induced tolerance against Cadmium (Cd) stress	MS (ES)	Dr. Salma Hamza	Muhammad Irfan	Dr. Nusrat Jalbani
7.	Muhammad Haseeb 02-262212-003	Assessment of Pollutants Transport in Hub Estuary and Churna Island using in situ Water Quality Testing and Remote Sensing	MS (ES)	Dr. Salma Hamza	Dr. M. Zeeshan Ali	Dr. Muhammad Azam
8.	Shahzaib Farrukh 02-262212-004	Indus Delta Depletion: Understanding the Role of Climate Change and Human Activities	MS (ES)	Mr. Muhammad Irfan	Dr. Salma Hamza	Dr. Amir Alamgir

9.	Sharjeel Iqbal 02-262212-005	Heavy Metals and other Pollutant Sources Contaminating Hub River and Hub Dam using Surface Water Analysis	MS (ES)	Ms. Shaista Iftikhar	Dr. Salma Hamza	Dr. Nusrat Jalbani
10.	Hafiz Syed Rehan Ajaz 02-262212-006	Assessment of Above Ground Blue Carbon Stock in Bundal Island	MS (ES)	Mr. Muhammad Irfan	Dr. M Zeeshan Ali	Dr. Muhammad Azam
11.	Syeda Ailya Hasan 02- 262212-007	Mangrove Carbon Stock Estimation using Remote Sensing and GIS Technique - A Case of Indus Delta	MS (ES)	Dr. Salma Hamza	Dr. M. Zeeshan Ali	Dr. Naushaba Hisam
12.	Zunaira Mursaleen 02-262212-008	Phytoremediation of Cassia alata plant and it's toleration of heavy metals (C.alata and C.alata) and determination of heavy metal element in plant	MS (ES)	Dr. Salma Hamza	Mr. Muhammad Irfan	Dr. Omm e Hany

Appointment of Examiners for MS Thesis Defense EE Department, Karachi Campus

S. No	Name (Enrollment #)	Thesis Title	Program	Supervisor (Co-Supervisor)	Internal Examiner	External Examiner
1.	Talha Minhas (02-244212-005)	Optimal Scheduling and Cost Evaluation of Electric Vehicle Charging Using Stochastic Scenario	MS (EE)	Dr. Haroon Rasheed	Dr. Muhammad Raza	Dr. Mohsin Aman

Appointment of Examiners for MS Thesis Defense CS Department, Lahore Campus

S. No	Name (Enrollment #)	Thesis Title	Program	Supervisor (Co- Supervisor)	Internal Examiner	External Examiner
1	Muhammad Furqan Khawaja 03-243201-023	PANDEMIC PREDICTION USING MACHINE LEARNING	MS (CS)	Dr Iram Noreen (Summaira Nosheen)	Dr Muhammad Aasim Qureshi	Dr. Faiza Iqbal
2	Muhammad Shahid Shahbaz 03-243202-009	IDENTIFICATION OF HATE SPEECH ON TWITTER USING TEXT MINING	MS (CS)	Dr Saira Andleeb Gilani (Asad Kamal)	Dr Ghulam Mustafa	Dr. Zia ul Rehman
3	Shahid Nawaz Malik 03-243202-013	Sentiment analysis of tourist places in Lahore	MS (CS)	Dr Ghulam Mustafa (Asad Kamal)	Dr Iram Noreen	Dr. Adnan Nabeel Qureshi
4	Zoobia Fatima 03-243202-018	Students' personality traits prediction by handwriting analysis	MS (CS)	Dr Muhammad Aasim Qureshi	Dr Abdul Hafeez	Dr. Amjad Iqbal
5	Maryam Irshad 03-243211-002	Sentiment analysis in English text using fuzzy logics	MS (CS)	Dr Muhammad Aasim Qureshi	Dr Ghulam Mustafa	Dr. Shoaib Farooq
6	Muhammad Umar 03-243211-004	COVID-19 Data Analysis Using Computational Intelligence	MS (CS)	Dr Iram Noreen (Mr Nadeem Sarwar)	Dr Muhammad Aasim Qureshi	Dr. Faiza Iqbal

Annex-II: Appointment of Examiners for PhD Proposal Defense

S. No	Name (Enrollment #)	Program	Thesis Title	Supervisor (Co-Supervisor)	Internal Examiner	External Examiner
1	Nasir Ali 01-284212-001	PhD CS BUIC	Synthesized PDF generation and evaluation framework for evading malware classifiers	Dr. Faisal Bashir	Dr. Moneeb Gohar	Dr. Kashif Kifayat Dr. Mian Muhammad Waseem Iqbal
2	Shahid Mahmood (01-284212-002)	PhD CS BUIC	Designing Network Based Zero Trust Architecture for Resource-Constrained Edge Devices Using Fog Computing	Dr. Moneeb Gohar	Dr. Faisal Bashir	Dr. M Sajjad Khan Dr Majid Iqbal
3	Darakhshan Syed 02-284212-001	PhD (CS) BUKC	An efficient hybrid load balancing mechanism for Cloud Computing by using metaheuristic algorithms	Dr. Ghulam Muhammad	Dr. Moazam Ali	Dr Jawwad A. Shamsi Dr. M. Malook Rind
4	Muhammad Shahzad 02-284212-002	PhD (CS) BUKC	Blockchain-Based Network Security Mechanism for Software-Defined Networking	Dr. Safdar Ali Rizvi	Dr. Muneeb Gohar	Dr. Taha Jilani Dr. Syed Abbas Ali
5	Muhammad Tauseef (02-281212-001)	PhD (SE) BUKC	Cognitive computing model for code refactoring in software applications	Dr. Sohaib Ahmed (Dr. Amina Jameel)	Dr Awais Majeed	Dr. Nadeem Mehmood Dr. Saood Zia

Annex-III a: Inclusion of Experts in the list of Local External Examiners for MS

S. No	Name	Designation	Affiliation	Research Area(s)	Sponsored By
1.	Dr Muhammad Azam	Assistant Professor	Department of Geography Federal Urdu University of Arts, Sciences and Technology, Karachi	Remote Sensing and GIS, Environmental Geosciences	EES, BUKC
2.	Dr. Waqar Ahmed	Assistant Professor	Institute of Environmental Studies, University of Karachi, Karachi	Environmental Sciences	EES, BUKC
3.	Dr. Falak Shad Memon	Assistant Professor	Department of Environment and Energy Management, the Institute of Business Management (IoBM) Karachi.	Environment and energy management, Urban Planning	EES, BUKC
4.	Mr. Shahid Bhutto	Principal Scientific Officer	Center for Environmental Studies, PCSIR, Karachi, Sindh	Environmental Sciences	EES, BUKC
5.	Mr. Hammad Manzoor	Senior Manager Exploration	Oil & Gas Investment Limited (OGIL), Karachi (Pakistan)	Geosciences; Environmental Sciences	EES, BUKC
6.	Dr. Emadullah Khan	Head of Department/ Lecturer	Department of Geology, Abdul Wali Khan University Mardan Pakistan	Geology	EES, BUIC
7.	Dr. Syed Mubashir Ali	Assistant Professor	PAFKIET	Machine Learning, Soft Computing, Information Security	CS, BUKC
8.	Dr. Jibran Ali	Assistant Professor	Usman Institute of Technology	Power Systems	EE, BUKC
9.	Dr. Tayyab Yaqoob	Assistant Professor	Sir Syed University of Engineering and Technology, Karachi	Power Systems	EE, BUKC
10.	Dr.Shafiq ur Rehman	Manager (Technical)	Public Sector Scientific Research and Development Organization	Software Quality Assurance and Testing, Software Engineering	SE, BUIC
11.	Dr. Muhammad Sajid	Assistant Professor	UET, Taxila	(Engineering Management) Cost Modeling, Lean Thinking, Rapid Prototyping and Tooling, Metal Casting	SE, BUIC
12.	Dr. Shahbaz Abbas	Assistant Professor	EME, NUST	(Engineering Management)	SE, BUIC

				Sustainability, Circular Economy, Engineering , Renewable Energy and Industrial Ecology	
13.	Dr. Muhammad Hanif	Assistant Professor	GIKI	AI modelling, Deep learning, Image and video processing,	CS, BUIC
14.	Dr Imran Rauf	Assistant Professor	Dept. of Computer Sciences, IBA	Algorithmic, enumeration problems, network flows mathematical approaches for solving real-world problems	SE, BUKC

Annex-III b: Inclusion of Experts in the list of Local External Examiners for MS & PhD

S. No	Name	Designation	Affiliation	Research Area(s)	Sponsored By
1.	Dr. Shahid Amjad	Professor, Head of Department	Department of Environment and Energy Management, the Institute of Business Management (IoBM) Karachi.	Marine Environment, Climate change, Ecosystem	EES, BUKC
2.	Dr. Jamshaid Iqbal	Assistant Professor	Department of Environment and Energy Management, the Institute of Business Management (IoBM) Karachi.	Environmental Sciences	EES, BUKC
3.	Engr. Dr. Zain Anwar Ali	Associate Professor	Sir Syed University	Optimization Algorithms, Bio-Inspired Algorithm, Unmanned vehicles, Control Theory	CS, BUKC
4.	Dr. Faraz Shaikh	Associate Professor	Nazeer Hussain University	Digital Signal & Image Processing, Digital Electronics and Microwave Imaging	CS, BUKC
5.	Engr. Dr. M. Ghazanfarullah Khan	Professor	UIT, University	Wireless Sensors Networks	CS, BUKC
6.	Dr. Abdul Qadir	Dean Faculty of Engineering & Technology	Usman Institute of Technology	Power Systems	EE, BUKC
7.	Dr. Zunera Jalil	Professor and HoD	Air University	Cyber Security	CS, BUIC
8.	Dr. Raheela Asif	Associate Professor	Dept. of Software Engineering, NED UET	Data mining, Natural Language Processing	SE, BUKC

Annex-IV: Inclusion of Experts in the List of Foreign Evaluators

S. No	Name	Designation	Affiliation	Post-PhD Experience	Research Area(s)	Sponsored By
1.	Dr. John H. Shaw	Professor	School of Engineering and Applied Sciences (SEAS) Harvard University	40 years	Petroleum Geosciences	EES, BUIC
2	Dr. Rosilah Hassan	Associate Professor	Universiti Kebangsaan Malaysia	14 Years	Cyber Security, Big Data, IoT, Wireless Communication, 5G	CS, BUKC
3	Dr. Wan Mohd Nazmee Wan Zainon	Associate Professor	Universiti Sains Malaysia	12 Years	Visual Computing, software reuse, requirement engineering practices, visual data mining and big data analytics	CS, BUKC
4	Nurul Hashimah Ahamed	Associate Professor	Universiti Sains Malaysia	12 Years	Big Data Analytics, Data Mining, Time Series Prediction, Machine Learning, and Deep Learning; Text Mining and Sentiment Analysis	CS, BUKC
5	Zuzurinahni Bt Hj Zainol	Associate Professor	Universiti Sains Malaysia	11 Years	UXML Databases Design and Normalization Theory UFormal Specification in Software Development Information Retrieval in Multidisciplinary Applications Data Modelling, Prediction and Features Selection	CS, BUKC

					Bioinformatic Application	
6	Dr. Norisma Idris	Associate Professor	Universiti Malaya	12 Years	Natural Language Processing (Machine Translation, Sentiment Analysis), AI In Education (knowledge representation, understanding & categorization)	CS, BUKC
7	Dr. Suraya Hamid	Associate Professor	Universiti Malaya	10 Years	Learning Analytics, social informatics, educational technology, information services, e-learning, and data analytics	CS, BUKC
8	Manmeet Kaur Mahinderjit Singh	Associate Professor	Universiti Sains Malaysia	10 Years	Information Security, Cyber Security & Network Security Smart Security (RFID/NFC/ IoT /Ambient Intelligence Systems /Mobile Crowd Sensing /Smartphones/ Wearable Technology/ Smart Home Technology) Data Mining Technologies &	CS, BUKC

					Security Applications (Intrusion Detection/ Alert Management / Anomaly Detection/ Cost - Sensitive Systems) Cyber Crime Security Solutions (Bring Your Own Devices (BYOD) / Advanced Persistent Threat Attack- Security Policies Models & Analytical Tools / Cybercrime Theories and Dark web Analytics)	
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Annex-V: Recommendation of Foreign Evaluators for PhD Candidates

S. No	Name (Enrollment #)	Dept.	Program	Supervisor	Thesis Title	Recommended Foreign Evaluators
01	Muhammad Irfan (02-283161-004)	E&ES, BUKC	PhD (Geophysics)	Dr. Salma Hamza (Dr. Anwar Qadir)	Overexploitation of Groundwater and its Impact on Quality of Water in Winder, Balochistan- An Environmental Geophysical Approach	Dr. Haylay Tsegab Dr. Nordiana Mohd Muztaza Dr. Sun Jichao Dr. You Liang Ji
2	Jawwad Abdullah Butt (02-282162-001)	E&ES, BUKC	PhD (Environmental Sciences)	Dr. Yasmin Nergis	Combustion Modeling in the Riser of Fluidized Bed Combustor for Thar Coal and its Blends for Emission Control	Dr. Saeid Baroutian Dr. Sun Jichao Dr. Luis Carlos Belalcazar Ceron Dr. Rini Asnida Binti Abdullah
3	Naureen Hasan (02-284162-001)	CS BUKC	PhD (CS)	Dr. Safdar Ali Rizvi	Interference Managed Hybrid Clustering Techniques to Improve 5G Radio Resource Management	Prof. Nandana Rajatheva Dr. Fabrizio Granelli Dr. Jaime Lloret Dr. Naveen Chilamkurti Smiee
4	Sameena Javaid 02-284172-002	CS BUKC	PhD (CS)	Dr. Safdar Ali Rizvi	Dynamic Sign Language Recognition using Deep Learning	Prof. Guoying Zhao Dr. Gennaro Vessio Dr. Guray Erus Dr. Malek Mouhoub
5	Engr. Arshee Ahmed Tanveer (02-281171-001)	EE BUKC	PhD (EE)	Dr. Haroon Rasheed	Millimetre Wave for VANET Communication Using Efficient Coding Technique	Dr. Fumiyuki Adachi Dr. Abbas Jamalipour Dr. Naveen Chilamkurti Dr. Fabrizio Granelli
6	Zahra Waheed Awan 01-281171-006	CE BUIC	PhD	Dr. Shehzad Khalid (Dr. Usman Akram)	Parallel Architecture of Convolutional Neural Network for Object Classification	Dr. Naima Kaabouch Dr. Cigdem Beyan Dr Constantino Carlos Reyes Aldasoro Dr. Zhi-Gong Wang
7	Amna Waheed Awan 01-281171-005	CE BUIC	PhD	Dr. Shehzad Khalid (Dr. Usman Akram)	Analysis of Physiological Signals for Emotion Charting	Dr. Naima Kaabouch Dr. Seungmin Rho Dr. Gennaro Vessio Dr. Cigdem Beyan

8.	Arjan Das (02-282171-001)	E&ES, BUKC	PhD (ES)	Dr. Yasmin Nergis	Spatio-temporal studies of air pollutants and their impacts on Karachi region, Pakistan	Dr. Luis Carlos Belalcazar Ceron Dr. Sun Jichao Dr. Saeid Baroutian Dr. Rini Asnida Binti Abdullah
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Annex-VI: Appointment of Supervisors & Advisory Committees

SNo.	Name (Enrollment #)	Program	Dept. / Campus	Supervisor (Co-Supervisor)	Advisory Committee
1.	Zohaib Naseer 01-286222-004	PhD Geophysics	EES Islamabad	Dr. Muhsan Ehsan	Dr. Muhsan Ehsan Dr. Urooj Shakir Dr. M. Fahad Mehmood
2.	Aisha Khaled Chaudhri 01-286222-001	PhD ES	EES Islamabad	Dr. Aansa Rukya Saleem	Dr. Aansa Rukya Saleem Dr. Said Akbar Khan Dr. Asma Jamil
3.	Kamran Siddique (01-286222-002)	PhD ES	EES Islamabad	Dr. Aansa Rukya Saleem	Dr. Aansa Rukya Saleem Dr. Humera Farah Dr. Asma Jamil
4.	Shahzad Naveed 01-286222-003	PhD ES	EES Islamabad	Dr. Said Akbar Khan	Dr. Aansa Rukya Saleem Dr. Said Akbar Khan Dr. Asma Jamil
5.	Saneeha Khalid 01-284172-002	PhD CS	CS BUIC	Dr. Faisal Bashir	Dr. Faisal Bashir Dr. Moneeb Gohar Dr. Khurram Ehsan
6.	Shahela Saif 01-284181-002	PhD CS	CS BUIC	Dr. Samabia Tehsin	Dr. Samabia Tehseen Dr. Sumaira Kausar Dr. Fatima Khaliq
7.	Amir Ali 01-284202-002	PhD CS	CS BUIC	Dr. Sumaira Kausar (Dr. Wizra Saeed)	Dr. Sumaira Kausar Dr. Fatima Khaliq Dr. Aleeha Iftikhar
8.	Nasir Iqbal 01-284212-001	PhD CS	CS BUIC	Dr. Faisal Bashir	Dr. Faisal Bashir Dr. Khurram Ehsan Dr. Moneeb Gohar
9.	Qasim Mehmood 01-284221-001	PhD CS	CS BUIC	Dr. Sumaira Kausar (Imran Ahmed Siddiqi)	Dr. Sumaira Kausar Dr. Arif ur Rehman Dr. Fatima Khaliq
10.	Nazia Shahmir 01-283202-001	PhD Mathematics	MATH BUIC	Dr. Muhammad Ramzan	Dr. Muhammad Ramzan Dr. Jafar Hasnain Dr. Naila Shaheen
11.	Ali Raza 01-283202-002	PhD Mathematics	MATH BUIC	Dr. Jafar Hasnain (Dr. Rizwan ul Haq)	Dr. Jafar Hasnain Dr. Nazia Talat Dr. Naila Shaheen
12.	Nomana Abid	PhD Mathematics	MATH BUIC	Dr. Jafar Hasnain	Dr. Jaffer Hasnain

	01-283212-001				Dr. Muhammad Ramzan Dr. Naila Shaheen
13.	Muhammad Tauseef (02-281212-001)	PhD (SE)	SE BUKC	Dr. Sohaib Ahmed (Dr. Amina Jameel)	Dr. Sohaib Ahmed Dr. Salahuddin Sheikh Dr. Najeed Ahmed Khan
14.	Darakhshan Syed 02-284212-001	PhD (CS)	CS BUKC	Dr. Ghulam Muhammad	Dr. Ghulam Muhammad Dr. Raheel Siddiqi Dr. Osama Rehman

Annex-VII: Recommendation of Examiners for PhD Final Thesis Defense (FTD)

SNo.	Name (Enrolment #)	Dept./Campus	Program	Supervisor (Co-Supervisor)	Thesis Title	Recommended Examiners¹
1	Muhammad Raiees Amjad 01-286162-001	EES BUIC	PhD Geology	Prof. Dr. Mohammad Zafar	Constraining Pore Pressure Prediction in Relevance with the Basin Architecture of Eastern Potwar, Pakistan	External Examiners: Dr. Aamir Ali Dr. Muhammad Irfan Ehsan Dr Anees Ahmed Bangash Dr. Mirza Naseer Ahmad Internal Examiners: Dr. M. Iqbal Hajana Dr. Muhsan Ehsan
2	Ms. Naureen Hasan 02-284162-001	CS BUKC	PhD (CS)	Dr. Safdar Ali Rizvi	Interference Managed Hybrid Clustering Techniques to Improve 5G Radio Resource Management	External Examiners: Dr. Abbas Ali Dr. Taha Jilani Dr. M. Mulook Rind Dr Muhammad Khaliq-ur- Rehman Razi Syed Internal Examiners: Dr. Muneeb Gohar Dr. Mukesh Kumar
	Sameena Javaid 02-284172-002	CS BUKC	PhD (CS)	Dr. Safdar Ali Rizvi	Dynamic Sign Language Recognition using Deep Learning	External Examiners: Dr. Najeed Ahmed Dr. Muhammad Sarim Dr. Nadeem Mehmood Dr. Aftab Ahmed Internal Examiners: Dr. Sumaira Kausar Dr. Raheel Siddiqi
3	Maryam Iqbal Shah Taizi (01-281171- 003)	EE BUIC	PhD	Dr Asif Mahmood Mughal (Dr Junaid Imtiaz)	Modeling and Control Synthesis of Robotic Digits for Movement Coordination in An Anthropomorphic and Impaired Hand	External Examiners: Dr Noman Naseer Dr Ahsan Ali Dr Mukhtar Ullah Dr Ammar Hasan Internal Examiners: Dr. Khawaja Qasim Maqbool Dr Abdul Attayyab Khan

4	Syed Umaid Ali 01-281172-006	EE BUIC	PhD	Dr. Asad Waqar (Dr. Muhammad Aamir)	Control of hybrid AC-DC Microgrids using variable weighing factor algorithm	External Examiners: Dr. Ammar Hassan Dr. M. Shoaib Khalid Dr. Azhar ul Haq Dr. Intisar Ali Sajjad Internal Examiners: Dr. Muhammad Raza Dr. Haroon Rashid
5	Farrukh Shahzad Ahmed 01-281162-002	SE BUIC	PhD (SE)	Dr. Tamim A Khan (Dr.Awais Majeed)	APPLICATIONS OF VALUE-CENTRIC REGRESSION TESTING FOR SOFTWARE APPLICATIONS	External Examiners: Dr. Basit Shahzad Dr. Muddassar Azam Sindhu Professor Dr. Hammad Afzal Dr. Noman Malik Internal Examiners: Dr. Sohaib Ahmed Dr. Humera Farooq
6	Zulfiqar Ali 01-281151-001	SE BUIC	PhD (SE)	Dr. Kashif Naseer Qureshi (Dr. Shugufta Henna)	Services Provisioning by Using Intelligent Learning for Long Range Wide Area Network (LoRaWAN)	External Examiners: Dr. Muazzam A. Khattak Dr. Saleem Iqbal Dr. Khalid Mahmood Awan Dr. Kashif Kifayat Internal Examiners: Dr. Faisal Bashir Dr. Osama Rehman
7	Khurram Mustafa Abbasi 01-281152-002	SE BUIC	PhD (SE)	Dr. Tamim A Khan (Dr. Irfan ul Haq)	A UNIFIED MODELING FRAMEWORK FOR INTERNET OF THINGS (IOT) SYSTEMS	External Examiners: Dr. Shariq Hussain Dr. Adnan Sohail Dr. Hammad Afzal Dr. Muhammad Abid Internal Examiners: Dr. Awais Majeed Dr. Sohaib Ahmed
8.	Ms. Shaista Mahmud 02-283161-003	EES BUIC	PhD Geophysics	Dr. Salma Hamza (Dr. Anwar Qadir)	Spatial analysis of groundwater quality using geophysical and geochemical approach in Uthal, Balochistan	External Examiners: Dr. Erum Bashir Dr. Noushaba Hisam Dr Muhammad Hassan Agheem

						Dr. Akhtar Hussain Markhand Internal Examiners: Dr. Said Akbar Khan Dr. Fahad Mahmood
9.	Mr. Muhammad Irfan 02-283161-004	EES BUKC	PhD Geophysics	Dr. Salma Hamza (Dr. Anwar Qadir)	Overexploitation of Groundwater and its Impact on Quality of Water in Winder, Balochistan- An Environmental Geophysical Approach	External Examiners: Dr. Erum Bashir Dr. Muhammad Hassan Agheem Dr. Muhammad Murtaza Dr. Abdul Salam Khan Internal Examiners: Dr. Fahad Mahmood Dr. Said Akbar Khan
10.	Jawwad Abdullah Butt (02-282162-001)	EES BUKC	PhD ES	Dr. Yasmin Nergis	Combustion Modeling in the Riser of Fluidized Bed Combustor for Thar Coal and its Blends for Emission Control	External Examiners: Dr. Mehmood Ali Dr. Suriya Jabeen, Dr. Omm e Hany Dr. Moazzam Ali Khan Internal Examiners: Dr. Aanisa Rukya Saleem Dr. Said Akbar Khan

¹ Subject to clearance of foreign evaluation where applicable

Annex-VIII: Extension in Time Bar of PhD Scholars

SNo.	Name	Dept.	Program	Supervisor (Co-Supervisor)	Decision
1	Ms. Shaista Mahmud 02-283161-003	EES	PhD Geophysics	Dr. Salma Hamza (Dr. Anwar Qadir)	One-year extension recommended by the FRC for approval from the competent authority 11-03-2023 to 10-03-2024
2.	Mr. Muhammad Irfan 02-283161-004	EES	PhD Geophysics	Dr. Salma Hamza (Dr. Anwar Qadir)	One-year extension recommended by the FRC for approval from the competent authority 11-03-2023 to 10-03-2024
3.	Mr. Arjan Das 02-282171-001	EES	PhD Environmental Sciences	Dr. Yasmin Nergis	One year extension granted by the FRC 21-03-2023 to 20-03-2024
4.	Maryam Iqbal Shah Taizi 01-281171-003	EE BUIC	PhD (EE)	Dr Asif Mahmood Mughal (Dr Junaid Imtiaz)	One year extension granted by the FRC 07-02-2023 to 06-02-2024
5	Engr. Arshee Ahmed Tanveer (02-281171-001)	EE BUKC	PhD (EE)	Prof. Dr. Haroon Rasheed	One year extension granted by the FRC 07-02-2023 to 06-02-2024
6	Ms. Fasiha Ikram 02-284171-001	CS BUKC	PhD (CS)	Dr. Humera Farooq	One year extension granted by the FRC 07-02-2023 to 06-02-2024
7	Ms. Zahra Waheed Awan 01-281171-006	CE BUIC	PhD (CE)	Dr. Shehzad Khalid (Dr. Usman Akram)	One year extension granted by the FRC 07-02-2023 to 06-02-2024
8	Ms. Amna Waheed Awan 01-281171-005	CE BUIC	PhD (CE)	Dr. Shehzad Khalid (Dr. Usman Akram)	One year extension granted by the FRC 07-02-2023 to 06-02-2024

Annex-IX: Appointment of Examiners for PhD Comprehensive Exams

Sr.	Name (Enrolment #)	Dept., Campus	Program	Supervisor (Co- Supervisor)	Research Theme	Course	Examiner
1	Ms. Nomana Abid 01-283212-001	CS BUIC	PhD (Maths)	Dr. Jaffer Hasnain	Fluid Mechanics	Advanced Functional Analysis	Dr. Muhammad Ramzan
						Perturbation Methods	Dr. Jaffer Hasnain
						Nonlinear Waves	Dr Naila Shaheen
						Heat and Mass Transfer	Dr. Muhammad Ramzan
2	Mr. Athar Waqar Alvi 01-284221-002	CS BUIC	PhD (CS)	Dr. Moneeb Gohar	Cyber Security	Advanced Cryptography	Dr. Faisal Bashir
						Deep Learning	Dr. Sumaira Kausar
						Cloud Computing	Dr. Moneeb Gohar
						Machine Learning	Dr. Saba Mahmood
3	Qasim Mehmood 01-284221-001	CS BUIC	PhD (CS)	Dr. Sumaira Kausar (Dr. Imran Hamed Siddique)	AI, Visual Question Answering	Computer Vision	Dr. Shehzad Khalid
						Advanced Natural Language Processing	Dr. Muhammad Asfand-e-Yar
						Cloud Computing	Dr. Moneeb Gohar
						Advanced Operating Systems	Dr. Moazzam Ali

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