CS-1A

Day/Period	1	п	ш	1:15-1:45	IV	v
Monday		Introduction to Information and Communication Technology - Lab 1 Muiz Qadir			English Composition and Comprehension - Lab Muhammad Iqbal	
Tuesday	Linear Algebra 1 Amjad Hussain	Islamic Studies/Ethics 1 Rizwanullah	English Composition and Comprehension - Lab 1 Sadia Ashfaq English Composition and Comprehension 1 Muhammad Ammar		English Composition and Comprehension - Lab 1 Sadia Ashfaq	English Composition and Comprehension 1 Junaid Shahid
Wednesday	Digital Logic Design - Lab 1 Muhammad Arslan		English Composition and Comprehension 1 Junaid Shahid	L U N C H	English Composition and Comprehension 1 Muhammad Ammar	Programming Fundamentals 1 Rizwan ul Haq
Thursday	Programming Fundamentals - Lab Mughees Ismail		Digital Logic Design 1 Mirza Waqar Baig		Linear Algebra 1 Amjad Hussain	
Friday			Programming Fundamentals 1 Rizwan ul Haq		Islamic Studies/Ethics 1 Rizwanullah	Digital Logic Design 1 Mirza Waqar Baig

CS-1B

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	English Composition and Comprehension 1 Muhammad Ammar	English Composition and C	Comprehension - Lab 1		Digital Logic Design - Lab Mujahid Hussain	1
Tuesday	Programming Fundamentals 1 Rizwan ul Haq	English Composition and Comprehension 1 Junaid Shahid	Introduction to Information and Communication Technology - Lab 1 Umar Naseer		Introduction to Information and Communication Technology - Lab 1 Umar Naseer	Linear Algebra 1 Amjad Hussain
Wednesday	English Composition and Comprehension 1 Junaid Shahid	Programming Fundamentals - Lab Pariwish Touseef		L U N C H	Islamic Studies/Ethics Rizwanullah	1
Thursday	English Composition and C	d Comprehension - Lab			Digital Logic Design 1 Muhammad Sajid Iqbal	Linear Algebra 1 Amjad Hussain
Friday	English Composition and Comprehension 1 Muhammad Ammar	Digital Logic Design 1 Muhammad Sajid Iqbal	Programming Fundamentals 1 Rizwan ul Haq			

CS-1C

Day/Peri od	I	п	ш	1:15-1:45	IV	v
Monday	English Composition and Comprehension - Lab 1 Rida Akram English Composition and Comprehension 1 Junaid Shahid	English Composition and Comprehension - Lab 1 Rida Akram	English Composition and Comprehension - Lab 1 Junaid Shahid		English Composition and Comprehension - Lab 1 Junaid Shahid	Digital Logic Design 1 Dr. Adil Zulfiqar
Tuesday	Digital Logic Design - Lab Mujahid Hussain	1	Programming Fundamentals 1 Dr. Rabia Maqsood		Digital Logic Design 1 Dr. Adil Zulfiqar	Linear Algebra 1 Amjad Hussain
Wednesday	Introduction to Information and Communication Technology - Lab 1 Aqsa Younas		Programming Fundamentals 1 Dr. Rabia Maqsood	L U N C H		English Composition and Comprehension 1 Muhammad Ammar
Thursday	Islamic Studies/Ethics Zia Ahmad		1		Programming Fundamenta Ayesha Liaqat	ıls - Lab
Friday	Linear Algebra 1 Amjad Hussain	English Composition and Comprehension 1 Junaid Shahid English Composition and Comprehension 1 Muhammad Ammar				

CS-1D

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	Applied Physics 1 Waheed Ahmad	English Composition and Comprehension 1 Farah Iqbal	English Composition and Comprehension - Lab 1 Rida Akram		English Composition and Comprehension - Lab 1 Rida Akram	Applied Physics 1 Waheed Ahmad
Tuesday	Introduction to Information Technology - Iab	on and Communication	English Composition and Comprehension 1 Sadia Ashfaq		English Composition and Comprehension 1 Sadia Ashfaq	Programming Fundamentals 1 Dr. Rabi a Maqsood
Wednesday	English Composition and Comprehension - Lab Amna Farooq		Calculus and Analytical Geometry 1 Dr.Mushtaq Ahmad	L U N C H	English Composition and Comprehension 1 Farah Iqbal	
Thursday	Islamic Studies/Ethics 1 Zia Ahmad				Programming Fundamenta Muhammad Azeem Iftikha	1
Friday	Calculus and Analytical Geometry 1 Dr.Mushtaq Ahmad					Programming Fundamentals 1 Dr. Rabia Maqsood

CS-1E

Day/Period	ī	п	ш	1:15-1:45	IV	v
Monday	English Composition and Comprehension 1 Farah Iqbal	Introduction to Information Technology - Lab Muiz Qadir	on and Communication		English Composition and Comprehension - Lab 1 Amna Farooq	English Composition and Comprehension - Lab 1 Amna Farooq English Composition and Comprehension 1 Muhammad Iqbal
Tuesday		Pakistan Studies 1 Asif Naveed			Programming Fundamenta Mughees Ismail	ıls - Lab
Wednesday	Applied Physics 1 Waheed Ahmad	Pakistan Studies 1 Asif Naveed		L U N C H		Calculus and Analytical Geometry 1 Dr. Mushtaq Ahmad
Thursday		English Composition and Comprehension - Lab 1 Mah Rukh English Composition and Comprehension 1 Farah Iqbal	English Composition and Comprehension - Lab 1 Mah Rukh		English Composition and Comprehension 1 Muhammad Iqbal	Calculus and Analytical Geometry 1 Dr. Mushtaq Ahmad
Friday		Applied Physics 1 Waheed Ahmad			Programming Fundamenta Dr. Danish Shehzad	als 1

CS-1F

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday		Applied Physics 1 Waheed Ahmad	Calculus and Analytical Geometry 1 Dr. Mushtaq Ahmad		English Composition and C	Comprehension - Lab
Tuesday	English Composition and Comprehension 1 Sadi a Ashfaq	Applied Physics 1 Waheed Ahmad			English Composition and C	Comprehensi on - Lab
Wednesday	Introduction to Information and Communication Technology - Lab Muhammad Haseeb Arshad			L U N C H	English Composition and Comprehension 1 Sadia Ashfaq	
Thursday	Calculus and Analytical Geometry 1 Dr. Mushtaq Ahmad	Pakistan Studies 1 Asif Naveed	Programming Fundamentals - Lab 1 Umar Naseer		Programming Fundamentals - Lab 1 Umar Naseer	English Composition and Comprehension 1 Muhammad Iqbal
Friday	Programming Fundamentals 1 Saqib Hayat	Pakistan Studies 1 Asif Naveed	Programming Fundamentals 1 Saqib Hayat			English Composition and Comprehension 1 Muhammad Iqbal

CS-3A

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	Digital Logic Design 1 Muhammad Irfan Ishaq	Computer Organization and Assembly Language - Lab 1 Abuzar Ghafari	Computer Organization and Assembly Language - Lab 1 Abuzar Ghafari Differential Equations		Object Oriented Programming - Lab Muhammad Hannan Farooq Finance & Accounting	Object Oriented Programming - Lab 1 Muhammad Hannan Farooq
Tuesday	Differential Equations 1 Arfan Shahzad Object Oriented Programming 1 Shoaib Saleem	Digital Logic Design 1 Muhammad Irfan Ishaq	Arfan Shahzad Data Structures - Lab Saba Aslam		Agha Mureed Ahmad Khan Data Structures - Lab Saba Aslam Calculus and Analytical Geometry Bushra Niaz	Discrete Structures 1 Dr. Muhammad Ahmad
Wednesday		Computer Organization and Assembly Language 1 Abdul Qadeer Bilal Linear Algebra 1 Chilmana Sarmad		L U N C H	Discrete Structures 1 Dr. Muhammad Ahmad	Data Structures 1 Muhammad Husnain
Thursday	Calculus and Analytical Geometry 1 Bushra Niaz	Applied Physics 1 Muhammad Mohsin Hameed				
Friday	Computer Organization and Assembly Language 1 Abdul Qadeer Bilal	Applied Physics 1 Muhammad Mohsin Hameed Data Structures 1 Muhammad Husnain	Linear Algebra 1 Ghilmana Sarmad		Object Oriented Programming 1 Shoaib Saleem	Finance & Accounting 1 Agha Mureed Ahmad Khan

CS-3B

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	Object Oriented Programming - Lab 1 Muhammad Hannan Farooq		Computer Organization and Assembly Language 1 Abdul Qadeer Bilal		Computer Orgnaization and Assembly Language - Lab	
Tuesday		Differential Equations 1 Arfan Shahzad	Discrete Structures 1 Dr. Muhammad Ahmad		Data Structures - Lab Muhammad Hannan Faroo	rq.
Wednesday	Computer Organization and Assembly Language 1 Abdul Qadeer Bilal		Fundamentals of Management 1 Muhammad Tayyeb Riaz	L U N C H	Differential Equations 1 Arfan Shahzad	
Thursday	Object Oriented Programming 1 Dr Usman Habib					
Friday			Fundamentals of Management 1 Muhammad Tayyeb Riaz			Discrete Structures 1 Dr. Muhammad Ahmad Object Oriented Programming 1 Dr Usman Habib

CS-3C

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday			Differential Equations 1 Arfan Shahzad			
Tuesday					Computer Orgnaization an Ali Raza	d Assembly Language - Lab
Wednesday			Differential Equations 1 Arfan Shahzad	L U N C H	Data Structures 1 Dr. Hashim Yasin	
Thursday	Data Structures - Lab Mughees Ismail	1			Data Structures 1 Dr. Hashim Yasin	
Friday		Marketing Management 1 Syed Zeeshan Haider				Marketing Management 1 Syed Zeeshan Haider

CS-3D

Day/Period	1	п	ш	1:15-1:45	IV	v
Monday						Differential Equations 1 Muhammad Waqas Javed
Tuesday			Discrete Structures 1 Usman Ghous			Marketing Management 1 Syed Zeeshan Haider
Wednesday	Data Structures 1 Muhammad Usman Joyia		Data Structures - Lab 1 Saba Aslam	L U N C H	Data Structures - Lab 1 Saba Aslam	Differential Equations 1 Muhammad Waqas Javed
Thursday	Computer Orgnaization and Assembly Language - Lab 1 Ali Raza					Marketing Management 1 Syed Zeeshan Haider
Friday					Discrete Structures 1 Usman Ghous	Data Structures 1 Muhammad Usman Joyia

CS-3E

Day/Period	ī	II	ш	1:15-1:45	IV	v
Monday			Computer Organization and Assembly Language - Lab 1 Abuzar Ghafari		Computer Organization and Assembly Language - Lab 1 Abuzar Ghafari	Differential Equations 1 Hayat Ali
Tuesday			Finance & Accounting 1 Agha Mureed Ahmad Khan			Finance & Accounting 1 Agha Mureed Ahmad Khan
Wednesday				L U N C H		
Thursday		Differential Equations 1 Hayat Ali				
Friday						

CS-5A

Day/Period	I	Ш	ш	1:15-1:45	IV	v
Monday			Computer Networks - Lab 1 Ayesha Liaqat		Computer Networks - Lab 1 Ayesha Liaqat	
Tuesday			Software Design and Analysis 1 Dr. Muhammad Bilal		Software Design and Analysis 1 Dr. Muhammad Bilal	Web Programming 1 Muhammad Shahrose Khan
Wednesday	Computer Networks 1 Masood Habib	Probability and Statistics 1 Haris Khurram	Theory of Automata 1 Anmol Bilal	L U N C H	Web Programming 1 Muhammad Shahrose Khan	
Thursday	Probability and Statistics 1 Haris Khurram					Theory of Automata 1 Anmol Bilal
Friday			Computer Networks 1 Masood Habib			

CS-5B

Day/Period	I	11	ш	1:15-1:45	IV	v
Monday	Computer Networks 1 Dr. Bilal Khan	Theory of Automata 1 Anmol Bilal			Marketing Management 1 Hafiz M.Zeeshan Raza	Web Programming 1 Muhammad Shahrose Khan
Tuesday		Theory of Automata 1 Anmol Bilal				
Wednesday	Software Design and Analysis 1 Dr. Muhammad Bilal		Computer Networks - Lab 1 Ayesha Liaqat	L U N C H	Computer Networks - Lab 1 Ayesha Liaqat	Computer Networks 1 Dr. Bilal Khan
Thursday	Web Programming 1 Muhammad Shahrose Khan	Marketing Management 1 Hafiz M.Zeeshan Raza			Software Design and Analysis 1 Dr. Muhammad Bilal	
Friday						

CS-5C

Day/Period	I	11	ш	1:15-1:45	IV	v
Monday		Theory of Automata 1 Numan Shafi				
Tuesday	Computer Networks - Lab Sumaira Mustafa	1			Software Design and Analysis 1 Dr. Uzair Iqbal	
Wednesday	Computer Networks 1 Dr. Bilal Khan		Software Design and Analysis 1 Dr. Uzair Iqbal	L U N C H		
Thursday		Advanced Programming 1 Awais Azam			Theory of Automata 1 Numan Shafi	Advanced Programming 1 Awais Azam
Friday		Computer Networks 1 Dr. Bilal Khan	Probability and Statistics 1 Haris Khurram			Probability and Statistics 1 Haris Khurram

CS-5D

Day/Period	I	II	ш	1:15-1:45	IV	v
Monday	Discrete Structures Usman Ghous	1			Database Systems 1 Saqib Hayat	Operating System 1 Usman Ghous
Tuesday	Design and Analysis of Algorithms 1 Shoaib Saleem	Psychology 1 Aisha Bano	Operating System 1 Usman Ghous		Database Systems - Lab Saqib Hayat	1
Wednesday	Theory of Automata 1 Numan Shafi	Database Systems 1 Saqib Hayat		L U N C H		Theory of Automata 1 Numan Shafi
Thursday	Psychology 1 Aisha Bano				Operating Systems - Lab Muhammad Haseeb Arshad	ı I
Friday			Design and Analysis of Algorithms 1 Shoaib Saleem			

CS-5E

Day/Period	I	II	ш	1:15-1:45	IV	v
Monday	Psychology 1 Aisha Bano	Database Systems 1 Aliza Saced				Design and Analysis of Algorithms 1 Shoaib Saleem
Tuesday	Database Systems - Lab 1 Muhammad Shahrose Khan					Theory of Automata 1 Numan Shafi
Wednesday				L U N C H		
Thursday	Psychology 1 Aisha Bano	Operating Systems - Lab Muhammad Yousaf	1		Design and Analysis of Algorithms 1 Shoaib Saleem	
Friday	Theory of Automata 1 Numan Shafi				Database Systems 1 Aliza Saced	

CS-7A

Day/Peri od	I	п	ш	1:15-1:45	IV	v
Monday	Artificial Intelligence 1 Dr. Shahnawaz Qureshi	Data Mining 1 Dr. Rabia Maqsood	Data Science 1 Adeel Ashraf Cheema			
Tuesday		Professional Practices in IT 1 Rizwan ul Haq	Data Mining 1 Dr. Rabia Maqsood		Information Security 1 Dr. Danish Shehzad	Data Science 1 Adeel Ashraf Cheema
Wednesday		Information Security 1 Dr. Danish Shehzad		L U N C H		
Thursday	Software Engineering 1 Awais Azam		Artificial Intelligence - Lab 1 Saba Aslam		Artificial Intelligence - Lab 1 Saba Aslam	
Friday		Professional Practices in IT 1 Rizwan ul Haq			Artificial Intelligence 1 Dr. Shahnawaz Qureshi	Software Engineering 1 Awais Azam

CS-7B

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday		Data Mining 1 Nasreen Akhtar			Professional Practices in IT 1 Masood Habib	
Tuesday	Professional Practices in IT 1 Masood Habib	Software Engineering 1 Awais Azam				Information Security 1 Dr. Danish Shehzad
Wednesday	Data Science 1 Adeel Ashraf Cheema		Data Science 1 Adeel Ashraf Cheema	L U N C H	Information Security 1 Dr. Danish Shehzad	
Thursday						
Friday	Data Mining 1 Nasreen Akhtar				Software Engineering 1 Awais Azam	

CS-7C

Day/Peri od	I	п	ш	1:15-1:45	IV	v
Monday					Information Security 1 Dr. Irfan ul Haq	
Tuesday						
Wednesday		Applied Machine Learning 1 Dr. Hashim Yasin		L U N C H	Information Security 1 Dr. Irfan ul Haq	
Thursday	Software for Mobile Devices - Lab 1 Tahir Farooq		Professional Practices in IT 1 Masood Habib		Applied Machine Learning 1 Dr. Hashim Yasin	
Friday					Professional Practices in IT 1 Masood Habib	

CS-7D

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday		Information Security 1 Dr. Muhammad Umar Aftab				
Tuesday			Software for Mobile Devices - Lab 1 Tahir Farooq		Software for Mobile Devices - Lab 1 Tahir Farooq	
Wednesday		Applied Machine Learning 1 Dr. Hashim Yasin		L U N C H		
Thursday	Information Security 1 Dr. Muhammad Umar Aftab		Professional Practices in IT 1 Tehreem Aslam			
Friday	Professional Practices in IT 1 Tehreem Aslam					Applied Machine Learning 1 Dr. Hashim Yasin

CS-7E

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday						
Tuesday			Information Security 1 Dr. Muhammad Umar Aftab		Professional Practices in IT 1 Tehreem Aslam	Software Testing 1 Dr. Uzair Iqbal
Wednesday		Software Testing 1 Dr. Uzair Iqbal		L U N C H		Fundamentals of Software Project Management 1 Dr. Muhammad Bilal
Thursday						Professional Practices in IT 1 Tehreem Aslam
Friday			Fundamentals of Software Project Management 1 Dr. Muhammad Bilal		Information Security 1 Dr. Muhammad Umar Aftab	

CS-7F

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	Software Testing 1 Dr. Uzair Iqbal	Remote Sensing and GIS 1 Dr M. Shahzad Sarfraz			Remote Sensing and GIS 1 Dr M. Shahzad Sarfraz	
Tuesday					Software Testing 1 Dr. Uzair Iqbal	
Wednesday				L U N C H		
Thursday						
Friday						

CS-9A

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday			Computer Architecture 1 Muhammad Usman Joyia			
Tuesday	1		Computer Architecture 1 Muhammad Usman Joyia			
Wednesday				L U N C H		
Thursday						
Friday						

SE-1A

Day/Peri od	I	п	ш	1:15-1:45	IV	v
Monday	English Composition and Comprehension - Lab 1 Muhammad Ammar		English Composition and Comprehension - Lab 1 Ehtasham-Ul-Haq		English Composition and Comprehension - Lab 1 Ehtasham-Ul-Haq	Applied Physics 1 Waheed Ahmad
Tuesday	Calculus and Analytical Geometry 1 Bushra Niaz		Programming Fundamentals 1 Sumaira Mustafa		English Composition and Comprehension 1 Farah Iqbal	
Wednesday	Programming Fundamentals - Lab 1 Sumaira Mustafa		English Composition and Comprehension 1 Farah Iqbal	L U N C H	Applied Physics 1 Waheed Ahmad	Pakistan Studies 1 Asma Yaqoob
Thursday	Introduction to Information and Communication Technology - Lab 1 Umar Naseer		Pakistan Studies 1 Asma Yaqoob		English Composition and Comprehension 1 Sadia Ashfaq	
Friday			Programming Fundamentals 1 Sumaira Mustafa			English Composition and Comprehension 1 Sadia Ashfaq

SE-1B

Day/Period	1	п	ш	1:15-1:45	IV	v
Monday	Applied Physics 1 Dr. Arslan Ahmed Amin	Introduction to Information and Communication Technology - Lab 1 Muhammad Haseeb Arshad			English Composition and Comprehension 1 Rida Akram	Calculus and Analytical Geometry 1 Bushra Maz
Tuesday		Applied Physics 1 Dr. Arslan Ahmed Amin	Programming Fundamentals 1 Aliza Saeed		Programming Fundamenta Aliza Saeed	ıls-Lab
Wednesday	Pakistan Studies 1 Zainab Javeed	English Composition and Comprehension - Lab 1 Sadia Ashfaq		L U N C H	Pakistan Studies 1 Zainab Javeed	English Composition and Comprehension 1 Muhammad Iqbal
Thursday	English Composition and Comprehension - Lab 1 Farah Iqbal				Programming Fundamentals 1 Aliza Saeed	
Friday	English Composition and Comprehension 1 Rida Akram	Calculus and Analytical Geometry 1 Bushra Ni az				English Composition and Comprehension 1 Muhammad Iqbal

SE-3A

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	Software Requirement Engineering 1 Pariwish Touseef	Object Oriented Programming 1 Dr Usman Habib			Linear Algebra 1 Ghilmana Sarmad	Human Computer Interaction 1 Dr. Shahnawaz Qureshi
Tuesday			Object Oriented Programming 1 Dr Usman Habib		Data Structures - Lab Aqsa Younas	1
Wednesday		Human Computer Interaction 1 Dr. Shahnawaz Qureshi	Object Oriented Programming - Lab 1 Muhammad Yousaf Data Structures 1 Muhammad Usman Joyia	L U N C H	Object Oriented Programming - Lab 1 Muhammad Yousaf	Marketing Management 1 Hafiz M.Zeeshan Raza
Thursday			Marketing Management 1 Hafiz M.Zeeshan Raza			
Friday	Data Structures 1 Muhammad Usman Joyia				Software Requirement Engineering 1 Pariwish Touseef	Linear Algebra 1 Ghilmana Sarmad

SE-3B

Day/Period	I	II	ш	1:15-1:45	IV	v
Monday	Data Structures 1 Asif Ameer	Data Structures - Lab Asif Ameer	1		Data Structures 1 Asif Ameer	Software Requirement Engineering 1 Pariwish Touseef
Tuesday			Finance & Accounting 1 Muhammad Nasif			
Wednesday	Software Requirement Engineering 1 Pariwish Touseef	Human Computer Interaction 1 Dr. Shahnawaz Qureshi		L U N C H	Human Computer Interaction 1 Dr. Shahnawaz Qureshi	
Thursday	Linear Algebra 1 Ghilmana Sarmad				Finance & Accounting 1 Muhammad Nasif	
Friday					Linear Algebra 1 Ghilmana Sarmad	

SE-5A

Day/Period	I	п	ш	1:15-1:45	IV	v
Monday	Database Systems - Lab Nasreen Akhtar	1			Software Construction and Muhammad Azeem Iftikha	1
Tuesday		Probability and Statistics 1 Haris Khurram			Software Quality Engineering 1 Tehreem Aslam	
Wednesday	Software Quality Engineering 1 Tehreem Aslam	Operating Systems - Lab Muhammad Yousaf	1	L U N C H	Operating Systems 1 Muhammad Husnain Operation Research 1 Dr. Muhammad Imran Babar	Technical and Business Writing 1 Muhammad Nouman Iftikhar
Thursday		Software Construction and Development 1 Dr. Affan Rauf	Database Systems 1 Nasreen Akhtar Operation Research 1 Dr. Muhammad Imran Babar		Operating Systems 1 Muhammad Husnain	
Friday	Database Systems 1 Nasreen Akhtar	Software Construction and Development 1 Dr. Affan Rauf	Probability and Statistics 1 Haris Khurram			Technical and Business Writing 1 Muhammad Nouman Iftikhar

SE-5B

Day/Period	1	п	ш	1:15-1:45	IV	v
Monday	Technical and Business Writing 1 Muhammad Nouman Iftikhar	Operation Research 1 Dr. Muhammad Imran Babar				
Tuesday	Operation Research 1 Dr. Muhammad Imran Babar	Software Construction and Development 1 Dr. Affan Rauf				Software Construction and Development 1 Dr. Affan Rauf
Wednesday		Probability and Statistics 1 Haris Khurram		L U N C H	Probability and Statistics 1 Haris Khurram	
Thursday					Software Construction and Muhammad Azeem Iftikha	1
Friday	Software Quality Engineering 1 Abdul Qadeer Bilal		Technical and Business Writing 1 Muhammad Nouman Iftikhar			Software Quality Engineering 1 Abdul Qadeer Bilal