

BACHELOR EXAM JULY 2021

This material contains the topics and bibliography recommended for the bachelor's theses developed within the School of Computer Science for Business Management, in the academic year 2020-2021.

TOPIC	RECOMMENDED BIBLIOGRAPHY
Developing software applications based on C programming language (C++, C# etc.)	1. Stanley B. Lippman, Josee Lajoie, Barbara E. Moo, C++ Primer, Addison-Wesley Professional Ed. (2012) 2. Bjarne Stroustrup, The C++ Programming Language, Addison-Wesley Professional Ed. (2013) 3. Andrew Troelsen, Philip Japikse, C# 6.0 and the .NET 4.6 Framework (2015) 4. John Sharp, Microsoft Visual C# Step by Step, 8th Edition, Developer Reference, (2015)
Developing software applications based on Java programming language (Java, Kotlin, Scala, JVM-generic etc.).	1. Java the Complete Reference – ISBN: 978-1260440232 - Herbert Schildt (2018) 2. Core Java Volume I--Fundamentals – ISBN 978-0135166307 – Cay Horstmann (2018) 3. Core Java, Volume II--Advanced Features – ISBN 978-0135166314– Cay Horstman (2019) 4. Beginning Jakarta EE Web Development: Using JSP, JSF, MySQL, and Apache Tomcat for Building Java Web Applications – ISBN: 978-1484258651 – Luciano Mineli, Giulio Zambon (2020)
Developing software applications based on Python programming language	1. Python Crash Course, 2nd Edition: A Hands-On, Project-Based Introduction to Programming – ISBN: 978-1593279288 – Eric Matthes (2019) 2. Guide to The Python Programming Language: Start Your Engines and Code: Python Programming for The Absolute Beginner – ISBN/ASIN: B09156FK9H - Akiko Cregin (2021) 3. Learning Python: A Crash Course to Learn Coding & Programming with Python in A Week: Learn Coding From Scratch – ISBN/ASIN: B0914CZ7C4 - Tim Sukovaty (2021) 4. How to Use MySQL, PHP and Python to Make Practical and Effective Projects – ISBN/ASIN: B09134RFD5 – Angel Johnson (2021)

Developing software applications based on Swift programming language	1. Mastering Swift 5: Deep dive into the latest edition of the Swift programming language, 5th Edition – ISBN/ASIN: B07RD3P9PY – Jon Hoffman (2019) 2. Mastering Swift 5.3: Upgrade your knowledge and become an expert in the latest version of the Swift programming language – ISBN: 978-1800562158 – Jon Hoffman (2020) 3. iOS 14 Programming Fundamentals with Swift: Swift, Xcode, and Cocoa Basics – ISBN: 978-1492092094 – Matt Neuburg (2020) 4. iOS 14 Programming for Beginners: Get started with building iOS apps with Swift 5.3 and Xcode 12 – ISBN: 978-1800209749 – Ahmad Sahar (2020)
Developing software applications based on VisualBasic programming language	1. Learn Visual Basic, ISBN/ASIN: B07YQ8BVPZ, Philip Conrod (2019) 2. Starting Out with Visual Basic, ISBN: 978-0135204658, Tonny Gaddis, Kip Irvine (2019) 3. Visual Basic 2019 Handbook: A Concise Guide to VB2019 Programming, ISBN/ASIN: B08PJWJWL1, Liew Voon Kiong (2020) 4. Visual Basic .Net and Database: Practical Tutorials, ISBN/ASIN: B08MC57J86, Vivian Siahaan, Rismon Hasiholan Sianipar (2020)
Developing software applications for computer networks	1. Computer Networking Problems and Solutions: An Innovative Approach to Building Resilient, Modern Networks, ISBN: 978-1587145049, Russ White, Ethan Banks (2018) 2. Beej's Guide to Network Programming: Using Internet Sockets, ISBN: 978-1705309902, Brian "Beej Jorgensen" Hall (2019) 3. Hands-On Network Programming with C# and .NET Core: Build robust network applications with C# and .NET Core, ISBN: 978-1789340761, Sean Burns (2019) 4. Computer Networking, ISBN/ASIN: B08KF4RQ5N, James F. Kurose, Keith Ross (2020)
Developing software applications based on .Net technical infrastructure	1. Kenneth E. Kendall, Julie E Kendall, Systems Analysis and Design, 10th Edition, Publisher: Pearson, ISBN 13: 978-0-13-481736-1 (2019) 2. Pro C# 8 with .NET Core 3: Foundational Principles and Practices in Programming, ISBN: 978-1484257555, Andrew Troelsen, Phil Japikse (2020) 3. Clean architecture with programming in Dot net Programming: Learn by simulation and Dot net

	Programming practice with experts Learn code by doing, ISBN/ASIN: B08Z8H49FW, Ken Lonsdale (2021)
Developing software applications based on other SQL DBMSs technical infrastructure (MariaDB, PostgreSQL, IBM Db2, Hive etc.)	1. Kenneth E. Kendall, Julie E Kendall, Systems Analysis and Design, 10th Edition, Publisher: Pearson, ISBN 13: 978-0-13-481736-1 (2019) 2. Learn SQL Database Programming: Query and manipulate databases from popular relational database servers using SQL, ISBN: 978-1838984762, Josephine Bush (2020)
Developing software applications based on Microsoft DBMSs technical infrastructure (MS Access, SQL Server etc.)	1. Alexander M., Kusleika R. – <i>Access 2016 Bible</i>, Wiley, (2015) 2. Finnegan K.T., Oja D., Vodnik S., Shellman M. – <i>New Perspectives Microsoft Office 365 & Access 2016: Comprehensive</i>, Cengage Learning (2016) 3. Pierce J. – <i>Exam 77-730 – MOS 2016 Study Guide for Microsoft Access</i>, Microsoft Press (2016) 4. Kenneth E. Kendall, Julie E Kendall, Systems Analysis and Design, 10th Edition, Publisher: Pearson, ISBN 13: 978-0-13-481736-1 (2019) 5. SQL Server Database Programming with Visual Basic.NET: Concepts, Designs and Implementations, ISBN: 978-1119608509, Ying Bai (2020)
Developing software applications based on non-SQL DBMSs technical infrastructure (MongoDB, Redis, DynamoDB, CouchDB, CosmosDB etc.)	1. Kenneth E. Kendall, Julie E Kendall, Systems Analysis and Design, 10th Edition, Publisher: Pearson, ISBN 13: 978-0-13-481736-1 (2019) 2. Learn MongoDB 4.x: A guide to understanding MongoDB development and administration for NoSQL developers, ISBN: 978-1789619386, Doug Bierer (2020)
Developing software applications based on Oracle Databases technical infrastructure	1. Dennis Alan, Systems Analysis and Design, 7th Edition, Wiley, ISBN-13 978-1119496502 (2018) 2. Kenneth E. Kendall, Julie E Kendall, Systems Analysis and Design, 10th Edition, Publisher: Pearson, ISBN 13: 978-0-13-481736-1 (2019) 3. Understanding Oracle APEX 20 Application Development: Think Like an Application Express Developer, ISBN: 978-1484261644, Edward Sciore (2020) 4. Kim Berg Hansen, Practical Oracle SQL - Mastering the Full Power of Oracle Database, Apress, ISBN 978-1-4842-5617-6 (2020)

Developing software applications based on PHP/MySQL technical infrastructure (standard and/or specific frameworks)	1. MySQL Cookbook: Solutions for Database Developers and Administrators – ISBN: 978-1449374020 – Paul DuBois (2014) 2. Learning PHP, MySQL & JavaScript: With jQuery, CSS & HTML5, ISBN: 978-1491978917, Robin Nixon (2018) 3. Beginning PHP and MySQL: From Novice to Professional – ISBN: 978-1430260431 – Frank M. Kromann (2018)
Developing web applications based on JavaScript infrastructure (front-end/back-end, standard and/or specific frameworks)	1. New Perspectives HTML5 and CSS3: Comprehensive – ISBN 978-1305503939 – Patrick M. Carey (2017) 2. Web Programming with HTML5, CSS, and JavaScript – ISBN 978-1284091793 – John Dean (2018) 3. Kenneth E. Kendall, Julie E Kendall, Systems Analysis and Design, 10th Edition, Publisher: Pearson, ISBN 13: 978-0-13-481736-1 (2019) 4. HTML5, CSS, and JavaScript: Learn the Basics of HTML5, JavaScript, & CSS with Practical Exercises of Computer Programming Languages – ISBN 978-1694550262 – Brandon Cooper (2019)

The bibliography will be implicitly completed with all the bibliographic materials from the subject sheets of the disciplines studied during the undergraduate educational path, consistent with the technology used for the elaboration of the practical application / case study within the undergraduate thesis.