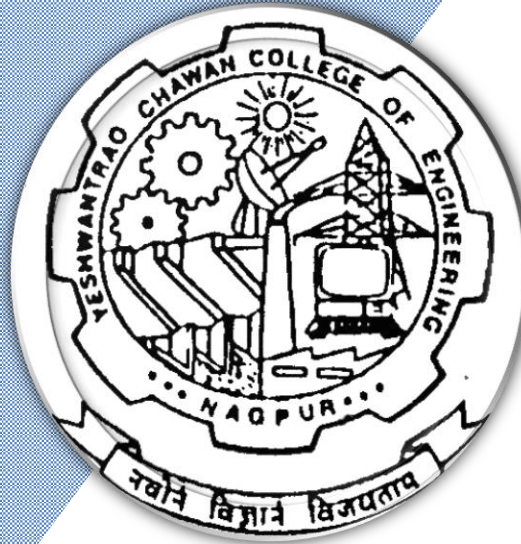# YCCE's CAREER ADVANCEMENT PROGRAMME SYLLABUS

(Applicable for AY 2021-22 onwards)

Yeshwantrao Chavan College of Engineering

(An Autonomous Institution affiliated to Rashtrasant Tukadoji Maharaj Nagpur University)

DETAILS OF YCCE's CAREER ADVANCEMENT PROGRAMME

Sr.No.	Applicable for Branches	Semester	Sub. Code	Audit Course name
1	All	1	AU2121	YCCE's Career Advancement Programme (YCAP1)
2	All	2	AU2122	YCCE's Career Advancement Programme (YCAP2)
3	All	3	AU2123	YCCE's Career Advancement Programme (YCAP3)
4	CV,ME,CT,IT,CSE	4	AU2124	YCCE's Career Advancement Programme (YCAP4.1) for CV,ME,CT,IT,CSE
5	EL,EE,ET	4	AU2125	YCCE's Career Advancement Programme (YCAP4.2) for EL,EE,ET
6	CV,ME,CT,IT,CSE	5	AU2126	YCCE's Career Advancement Programme (YCAP5.1) for CV,ME,CT,IT,CSE
7	EL,EE,ET	5	AU2127	YCCE's Career Advancement Programme (YCAP5.2) for EL,EE,ET
8	CV,EL	6	AU2128	YCCE's Career Advancement Programme (YCAP6.1) for CV,EL
9	ME, EE, ETC	6	AU2129	YCCE's Career Advancement Programme (YCAP6.2) for ME, EE, ETC
10	CT, IT, CSE	6	AU2130	YCCE's Career Advancement Programme (YCAP6.3) for CT, IT, CSE

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General Engineering
YCCE's CAREER ADVANCEMENT PROGRAMME

I Semester
AU2121: YCCE's CAREER ADVANCEMENT PROGRAMME

Objective	Outcomes
Get Set Go program is designed to introduce students to the real world. It gives them the skills they need to reach their goals and live up to their full potential at college, home and work. The program was developed with feedback from students; it consists of interactive sessions that include real-life scenarios and role-playing. It can help young adults become more confident and better able to cope with the pressure and stress they face.	The students gain more confidence and skills required to deal with the challenges they will face in college and at home. Their interpersonal and intrapersonal skills are enhanced pushing them to think towards their future and aim for their goals.

Syllabus Subject: Communication Skills – 1st Year, No. of hours - 18

UNIT I & 2 : 6 hours

Unit No.		Topic	Duration
1 & 2	1	Topic: Build a foundation for success - Explain the Importance of Process of improvement, stating your Name with Impact, Recall and Use Names, Name Remembering Formula o LIRA o PACE – Individual Activity o BRAMMS o Chaining Method, Introduce "My Vision"	150 min
	2.	Topic: Communication Fundamentals for Building Trust- Be a good listener, use conversation links, show genuine interest Hi-Five of Success ♣ Build on Memory Skills and Enhance Relationships ♣ PEG words ♣ Explain Permanent PEG Memory System, energize our Communications – Explain 3Vs of communication – Visual-Vocal-Verbal	120 min
		Practice Conversations, Activity – Pause-Part-Punch, Group Activity	90 min

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UNIT 3 & 4 : 6 hours

Unit No.	Topic	Duration
3 & 4	3 Topic: Increase Self Confidence -• Use our experiences to communicate more confidently • Communicate with clarity and conciseness • Discover how past experiences influence behavior	120 min
	4 Topic: Motivate Others and Enhance Relationships-• Learning Objectives • Explain Gain Willing Cooperation Principles • Group Presentation • Explain Demonstration of Leadership Principles • Explain "Evidence" critical in establishing credibility	130 min
	Individual Activity – Sharing of defining moment, Skit to demonstrate Leadership Principles, Stranded on Island	110 min

UNIT 5 & 6 : 6 hours

Unit No.	Topic	Duration
5 & 6	Topic: Fundamentals of Communication (Earn the right – Excite -Eagerness) ♣ Elevator Pitch ♣ Develop more Flexibility, ♣ Recap and Summarize	210 min
	Activities - – Individual Presentation, Flexibility Drills, Individual Presentations – My Vision Assignment	150 min

Reference Books:
1. How to win friends & influence people – Dale Carnegie

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General Engineering
YCCE's CAREER ADVANCEMENT PROGRAMME

II Semester
AU2122: YCCE's CAREER ADVANCEMENT PROGRAMME

AU2122 YCAP-II	No of Evaluations	Result of successful completion of YCAP II shall be calculated based on the basis of evaluations.
Evaluation Scheme	EVAL-I	**To pass the exam a students must score 50% marks**
	100 marks	

Objective	Objective
The aim of this course is to get the students to a common level in spoken English. The majority of the target group is expected to know English as a foreign/official language. Thus the objective of the course is to make the students comfortable in using it as a spoken language when the situation demands	Students will heighten their awareness of correct usage of English grammar in writing and speaking.

Syllabus Subject: Functional English – 2nd Sem , No. of hours - 20

UNIT I & 2 : 6 hours

Unit No.	Topic	Duration
1 & 2	Introduction to Functional English - What is FE? And Areas of application. Basic Interactive sentences - Greetings & Replies, Asking for information, Telling people what you do, Asking somebody's opinion, Giving your opinion, Saying someone is correct, Saying that someone is wrong, Apologizing, Praising someone's work, Saying goodbye	120 min
	Introduction & Basics of Common Expressions – Offer, Request, Gratitude, Apology Modal Verbs - Words used often : Can- could, Will – would, Shall – should, Ought to-Must, May-might	120 min
	Practice exercises, Practice Conversations, Script Activity	90 min
	Quiz on the above Topics, Exercises for Evaluation	30 min

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UNIT 3 & 4 : 7 hours

Unit No.	Topic	Duration
3 & 4	Topic: Internet & Social Media Communication Introduction & Basics to Social Networking, Texting & Instant messaging, Blogs & Discussion Board- discussion with examples, Ethics of Social media & communication	90 min
	Topic: Introduction to Creative Ads Why Ads, Whats in it for me?, Characteristics of ads, Assignment	90 min
	Topic: Tenses -1 Introduction & Basics, Simple Tense (Past, Present, Future), Continuous Tense (Past, Present, Future) – discussion with examples	120 min
	Assignment Presentation on Mad Ads, Quiz on Tenses and Social Media-Internet Communication	120 min

UNIT 5 & 6 : 7 hours

Unit No.	Topic	Duration
5 & 6	Topic: Tenses -2 Introduction & Basics, Perfect Tense (Past, Present, Future), Perfect Continuous Tense (Past, Present, Future) – discussion with examples	90 min
	Topic: Introduction to Movie Magic Learn English with films, Film Vocabulary, Describing a film, Types of Films,	120 min
	Topic: Written Communciation Introduction & Basics of Writing, Five methods of communication, Mind your grammar, Commonly confusing words Letters – Format, Parts of a business letter, When does communication fail?, Things to remember, Positive language not negative language, Active voice not passive voice Effective emailing -How to make an effective e-mail, Few common e-mail habits that cause problems, Parts of an e-mail, Some other important aspects	120 min
	Assessment – Letter and Email Writing, Tenses - Quiz	60 min

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III Semester
AU2123: YCCE's CAREER ADVANCEMENT PROGRAMME-III

AU2123 YCAP-III	**No of Evaluations**	**Result of successful completion of YCAP III shall be calculated based on the basis of evaluations.**
Evaluation Scheme	EVAL-I	**To pass the exam a students must score 50% marks**

Objective	Course Outcome
Objectives: The goal of this Audit Course is to enhance Communication, Technical and Aptitude Skills to make participants ready for Corporate Careers and help them become confident in their classroom participation and other academic activities.	**Outcome:** After completion of Audit Course Students will be able to communicate in English confidently, be comfortable with Data Structure and Algorithm & be able to crack the Campus Recruitment Test with ease.

Unit No.	Contents	Max. Hrs.
1	**Topic: Communication Skills** 1. **Topic: Introduction to Functional English** - What is FE? And Areas of application. Basic Interactive sentences - Greetings & Replies, asking for information, telling people what you do, asking somebody's opinion, giving your opinion, saying someone is correct, saying that someone is wrong, Apologizing, praising someone's work, Saying goodbye 2. **Topic: Common Expressions** – Offer, Request, Gratitude, Apology Modal Verbs - Words used often: Can- could, Will – would, Shall – should, Ought to-Must, May-might Practice exercises, Practice Conversations, Script Activity 3. **Topic: Internet & Social Media Communication** Introduction & Basics to Social Networking, Texting & Instant messaging, Blogs & Discussion Board- discussion with examples, Ethics of social media & communication 4. **Topic: Introduction to Creative Ads** Why Ads, What's in it for me? Characteristics of ads, Assignment	6
2	**Topic: Communication Skills** 1. **Topic: Written Communication** Introduction & Basics of Writing, five methods of communication, Mind your grammar, Commonly confusing words Letters – Format, Parts of a business letter, when does communication fail? Things to remember, Positive language not a negative language, Active voice not passive voice Effective emailing -How to make an effective e-mail, few common e-mail habits that cause problems, Parts of an e-mail, Some other important aspects 2. **Topic: Idioms & Phrases, Proverbs & Quotes** Introduction & Basics, Idioms & Phrases, why idioms are necessary for language, Exercise, Proverbs & Quotes - Explaining how proverbs & quotes can be used in language, Exercise	6

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	3. Topic: Directions and Descriptions Introduction & Basics of Prepositions and Descriptions, Picture Dictation, Types of prepositions, Exercise Describing People & physical traits, Drawing through the description Group Activities - Map reading, Skit	
3	**Topic: Technical** **C Programming:** Computer Basics, Constant Variable & Data Types, Operator and Expressions, Decision making, Branching & Looping, Array- Integer Array & Character Array, Pointers, Memory Allocation, Function & File Management	10
4	**Topic: Technical** **Data Structure & Algorithm:** Introduction to Data Structure- Data Representation, Data Structure & Structure Types, Complexity, Algorithm Analysis. Link List, Stack & Queue – Introduction, Types of Linked List, Representation, Sparse Matrix, Representation of Stack through Array & Linked list, Representation of Queues, Application of Queues	4
5	**Topic: Technical** 1. **Data Structure & Algorithm:** Trees – Introduction to Non-Linear Data Structure, Introduction to Binary Trees, Properties & Representation of Binary Array & AVL Tree, Operation on AVL Tree. 2. Searching & Sorting – Introduction, Different Types of Sorting, Binary Search, Indexed Sequential Search. 3. Graphs & Hashing – Introduction to Graph, Representation of Graphs, Application of Graph, Hash Function, Collision in Hashing	6
6	**Topic: Aptitude** 1. Introduction to Quantitative Aptitude Vedic Mathematics – Short Tricks for Multiplication, Square & Cube. 2. Number System – Number Tree, Divisibility Rules, HCF & LCM, Unit Digit Concept, Remainder Theorem. 3. Percentages – Basics of Percentages, Smart Fractions, Successive Increment & Decrement	10

Reference Books:
1. Soft Skills & Professional Communication, Francis Peters SJ, McGraw Hill Education
2. The Complete Reference C by Herbert Schidt, McGraw Hill Education
3. Let Us C by Yashwant Kanetkar
4. Data Structure with C (Schaum's Series) by Seymour Lipschutz
5. Data Structure using C by E Balagurusamy

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B. Tech Audit Course YCAP-IV Syllabus 2021-22
General Engineering
YCCE's CAREER ADVANCEMENT PROGRAMME

IV Semester
AU2124: YCCE's CAREER ADVANCEMENT PROGRAMME-IV

Branch: - Computer Science, Information Technology, Computer Technology, Mechanical Engineering, Civil Engineering

AU2124 YCAP-IV (CS, IT, CT, ME, CIV)	No of Evaluations	Result of successful completion of YCAP IV shall be calculated based on the basis of evaluation.
Evaluation Scheme	EVAL-I	To pass the exam a students must score 50% marks
	100 marks	

Objective	Course Outcome
Objectives: The goal of this subject curriculum is to enhance Communication, Technical and Aptitude Skills to make participants ready for Corporate Careers and help them become confident in their classroom participation and other academic activities.	**Outcome:** With the completion of this syllabus Students will be able to face Interviews be comfortable with C++ & be able to crack the Campus Recruitment Test with ease.

Unit No.	Contents	Max. Hrs.
1	**Topic: Aptitude** 1. Recap of Previous Semester Aptitude Topics i.e., Number System & Percentages 2. Advance level Problem solving related to Number systems & Percentages	4
2	**Topic: Aptitude** 1. Coding & Decoding 2. Set Theory & Venn Diagram 3. Syllogism	6
3	**Topic: Aptitude** 1. Root Words, Prefix & Suffix, Antonyms, Synonyms & Analogies 2. Cloze Test 3. Introduction to Para jumble 4. Modifiers & Parallel Structure 5. Practice Exercise	10

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General Engineering

YCCE's CAREER ADVANCEMENT PROGRAMME

4	**Topic: C++** Introduction to C++, Classes & Object, Class Methods, Class Constructor & destructor, Inheritance & Encapsulation, Polymorphism	6
5	**Topic: C++** 1. Function – Function Parameter, Default Parameter, Function – Pass by reference, Function Overloading, Operator Overloading 2. Arrays – Declaring Arrays, Initializing Arrays, Accessing Array Elements 3. C++ String - The C-Style Character String, Function & Purpose, The String Class in C++ 4. C++ Pointers & Reference - What are Pointers? Using Pointers in C++, Pointers in C++	10
6	**Topic: C++** 1. Namespaces - Defining a Namespace, the using directive, Nested Namespaces 2. Templates – Templates, Function Template, Class Template 3. C++ STL - Component & Description, Containers, Algorithms, Iterators 4. C++ Standard Library - The Standard Function Library, The Object-Oriented Class Library	4

REFERENCE BOOKS:
1. English Grammar in Use by Raymond Murphy
2. Quantitative Aptitude by R.S Agarwal – S. Chand Publication
3. Object-Oriented Programming with C++ by E. Balagurusamy, McGraw Hill Education

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YCCE-YCAP-2

Nagar Yuwak Shikshan Sanstha's
Yeshwantrao Chavan College of Engineering
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B. Tech Audit Course YCAP-IV Syllabus 2021-22
General Engineering
YCCE's CAREER ADVANCEMENT PROGRAMME

IV Semester
AU2125: YCCE's CAREER ADVANCEMENT PROGRAMME-IV

Branch: - Electronics Engineering, Electrical Engineering, Electronics & Telecommunication

AU2125 YCAP-IV (EL, EE & ETC)	No of Evaluations	Result of successful completion of YCAP IV shall be calculated based on the basis of evaluation.
Evaluation Scheme	EVAL-I	**To pass the exam a students must score 50% marks**
	100 marks	

Objective	Course Outcome
The goal of this subject curriculum is to enhance Communication, Technical and Aptitude Skills to make participants ready for Corporate Careers and help them become confident in their classroom participation and other academic activities.	With the completion of this syllabus Students will be able to face Interviews be comfortable with Embedded systems & be able to crack the Campus Recruitment Test with ease.

Unit No.	Contents	Max. Hrs.
1	**Topic: Aptitude** 1. Recap of Previous Semester Aptitude Topics i.e., Number System & Percentages 2. Advance level Problem solving related to Number systems & Percentages	4
2	**Topic: Aptitude** 1. Coding & Decoding 2. Set Theory & Venn Diagram 3. Syllogism	6
3	**Topic: Aptitude** 1. Root Words, Prefix & Suffix, Antonyms, Synonyms & Analogies 2. Cloze Test 3. Introduction to Para jumble 4. Modifiers & Parallel Structure 5. Practice Exercise	10

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B. Tech Audit Course YCAP-IV Syllabus 2021-22

General Engineering

YCCE's CAREER ADVANCEMENT PROGRAMME

4	**Topic: Embedded C** **Introduction to Embedded C** – Variable declaration, datatypes, naming rules, operator and order of operation, Learning Bit manipulation, Bitwise AND, OR, EX-OR, shift operator, etc. **Introduction to Embedded System:** - Introducing Microcontrollers, learning about registers of microcontroller, Accessing I/O registers using Embedded C, Writing, Compiling & Uploading Code to microcontrollers	5
5	**Topic: Embedded C** Interfacing I/O devices – Interfacing different sensors with a microcontroller, Interfacing Learning about communication protocols for Interfacing Bluetooth using serial & SPI OR I2C	8
6	**Topic: Embedded C** Introduction to ADC, Interfacing with WIFI Module (ESP8266), EEPROM	7

REFERENCE BOOKS:

1. English Grammar in Use by Raymond Murphy
2. Quantitative Aptitude by R.S Agarwal – S. Chand Publication
3. Object-Oriented Programming with C++ by E. Balagurusamy, McGraw Hill Education

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General Engineering

YCCE's CAREER ADVANCEMENT PROGRAMME

V Semester
AU2126: YCCE's CAREER ADVANCEMENT PROGRAMME-V

Branch: - Computer Science, Information Technology, Computer Technology, Mechanical Engineering, Civil Engineering

AU2126 YCAP-V (CS, IT, CT, ME, CIV)	No of Evaluations			The result of the successful completion of YCAP V shall be calculated based on average marks obtained in all evaluations.
Evaluation Scheme	EVAL-I	EVAL-II	EVAL-III	UNIT 1, UNIT 2 & UNIT 3 will be completed in a specially scheduled program at the beginning of the semester. Therefore EVAL – I will be completed at the beginning of the semester.
	30 marks	30 marks	40 marks	
	Shall be spanned during the course			

Objective	Course Outcome
The goal of this subject curriculum is to enhance Communication, Technical and Aptitude Skills to make participants ready for Corporate Careers and help them become confident in their classroom participation and other academic activities.	With the completion of this syllabus Students will be able to face Interviews be comfortable with Core Java & be able to crack the Campus Recruitment Test with ease.

Unit No.	Contents	Max. Hrs.
1	**Topic: Aptitude** 1. Recap of Previous Semester Aptitude Topics 2. Time & Work Part-1 3. Time & Work Part-2	6
2	**Topic: Aptitude** 1. Blood Relation & direction Sense 2. Seating Arrangement	4
3	**Topic: Aptitude** 1. Vocabulary Part-2 2. Parts of Speech Part-1 3. Parts of Speech Part-2 4. Conditional Sentences 5. Voice (Active & Passive)	10

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General Engineering

YCCE's CAREER ADVANCEMENT PROGRAMME

4	**Topic: Core Java** Basics of JAVA, Classes & Object, Data Types & Variable, Java Operators, Decision Making, Branching & Looping, Packages, Methods, Constructor, Modifiers, Blocks, Static & Final Keyword, Inner Classes, OOPS Concept in JAVA	8
5	**Topic: Core Java** Exception Handling, String, Thread, Wrapper Classes, Input & Output Stream, Java object Input & Output, Java Array, Java Garbage Collection	5
6	**Topic: Core Java** **Collection Framework in Java**: Set Interface, Set Implementation Classes, List interface, List Implementation Classes, Map Interface, Map implementation Classes, Queue Interface, Queue implementation Classes, Utility Classes, Sorting Collections using utility methods, equals() and hashCode Contract in java collection, overriding equals and hashCode methods in java, Primitive wrapper classes, and all its method APIs	7

REFERENCE BOOKS:

1. Soft Skills & Professional Communication, Francis Peters SJ, McGraw Hill Education
2. Quantitative Aptitude by R.S Agarwal – S. Chand Publication
3. GD-PI Handbook (Communication, Group Discussion, Interviews, GDPI, Essay & E-Mail Writing, Resume Building-in 25 Days) by RatnabhaSaha, Paperback Publications
4. Programming with Java by E. Balagurusamy, McGraw Hill Education

SITES CONSULTED/ E-SOURCES

1. https://timesofindia.indiatimes.com/life-style/relationships/work/Tips-for-a-Personal-Interview/articleshow/51327247.cms
2. https://www.getsetresumes.com/blog/143-difference-between-resume-cv-and-biodata/
3. https://testbook.com/blog/
4. http://www.geeksforgeeks.org/geeksquiz-home/

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Nagar Yuwak Shikshan Sanstha's
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B. Tech Audit Course YCAP-V Syllabus 2021-22
General Engineering
YCCE's CAREER ADVANCEMENT PROGRAMME

V Semester
AU2127: YCCE's CAREER ADVANCEMENT PROGRAMME-V

Branch: - Electronics Engineering, Electrical Engineering, Electronics & Telecommunication

AU2127 YCAP-V (EL, EE & ETC)	No of Evaluations			The result of the successful completion of YCAP V shall be calculated based on average marks obtained in all evaluations.
Evaluation Scheme	EVAL-I	EVAL-II	EVAL-III	**UNIT 1, UNIT 2 & UNIT 3 will be completed in a specially scheduled program at the beginning of the semester. Therefore EVAL – I will be completed at the beginning of the semester.**
	30 marks	30 marks	40 marks	
	Shall be spanned during the course			

Objective	Course Outcome
Objectives: The goal of this subject curriculum is to enhance Communication, Technical and Aptitude Skills to make participants ready for Corporate Careers and help them become confident in their classroom participation and other academic activities.	**Outcome:** With the completion of this syllabus Students will be able to face Interviews be comfortable with Embedded C++ & be able to crack the Campus Recruitment Test with ease.

Unit No.	Contents	Max. Hrs.
1	**Topic: Aptitude** 1. Recap of Previous Semester Aptitude Topics 2. Time & Work Part-1 3. Time & Work Part-2	6
2	**Topic: Aptitude** 1. Blood Relation & direction Sense 2. Seating Arrangement	4
3	**Topic: Aptitude** 1. Vocabulary Part-2 2. Parts of Speech Part-1 3. Parts of Speech Part-2 4. Conditional Sentences 5. Voice (Active & Passive)	10

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4	**Topic: Embedded C++** **Introduction to Embedded C++** – Variable declaration, datatypes, naming rules, operator and order of operation, Learning Bit manipulation, Bitwise AND, OR, EX-OR, shift operator, etc. **Introduction to Embedded System:** - Introducing Microcontrollers, learning about registers of microcontroller, Accessing I/O registers using Embedded C, Writing, Compiling & Uploading Code to microcontrollers	5
5	**Topic: Embedded C++** Interfacing I/O devices – Interfacing different sensors with a microcontroller, Interfacing Learning about communication protocols for Interfacing Bluetooth using serial & SPI OR I2C	8
6	**Topic: Embedded C++** Introduction to ADC, Interfacing with WIFI Module (ESP8266), EEPROM	7

REFERENCE BOOKS:

1. English Grammar in Use by Raymond Murphy

2. Quantitative Aptitude by R.S Agarwal – S. Chand Publication

3. Object-Oriented Programming with C++ by E. Balagurusamy, McGraw Hill Education

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YCCE-YCAP-2

Yeshwantrao Chavan College of Engineering

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B. Tech Audit Course YCAP-VI Syllabus 2021-22

General Engineering

YCCE's CAREER ADVANCEMENT PROGRAMME

VI Semester

AU2128: YCCE's CAREER ADVANCEMENT PROGRAMME (YCAP6.1)
Branch: - Civil Engineering , Electrical Engineering

AU2128 YCAP-VI (CV, EL)	No of Evaluations	Result of successful completion of YCAP VI shall be calculated based on the basis of evaluation.
Evaluation Scheme	EVAL-I	To pass the exam a students must score 50% marks
	100 marks	

Note: - For passing the Paper average of Evaluation Marks must be more than 50%.

Objective	Course Outcome
Objectives: The goal of this subject curriculum is to enhance Communication, Technical and Aptitude Skills to make participants ready for Corporate Careers and help them become confident in their classroom participation and other academic activities.	**Outcome:** With the completion of this syllabus Students will be able to face Interviews be comfortable with Java, Python & be able to crack the Campus Recruitment Test with ease. To be able to create desktop applications.

Unit No.	Contents	Max. Hrs.
1	**Topic: Communication Skills** 1. Art of giving effective Introduction in both Physical, Digital & Phygital Interviews **2.** Extempore – How to appear in online Extempore effectively – Tips & discussion on cracking extempore rounds in placements and Extempore Practice **3.** Resume Writing & Review	5
2	**Topic: Communication Skills** 1. Group discussion: Tips & Tricks, Mock GD Practice 2. Interview Preparation Tips 3. Types of Interviews – Explanation of Managerial, Technical & HR Round	5
3	**Topic: Aptitude** 1. Introduction to Quantitative Aptitude Vedic Mathematics – Short Tricks for Multiplication, Square & Cube. 2. Number System – Number Tree, Divisibility Rules, HCF & LCM, Unit Digit Concept, Remainder Theorem. 3. Percentages – Basics of Percentages, Smart Fractions, Successive Increment & Decrement	10

Chairperson	Dean (Acad. Matters)	June 2021	1.00	Applicable for AY 2021-22 Onwards
		Date of Release	Version	

Nagar Yuwak Shikshan Sanstha's

Yeshwantrao Chavan College of Engineering

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B. Tech Audit Course YCAP-VI Syllabus 2021-22

General Engineering

YCCE's CAREER ADVANCEMENT PROGRAMME

4	**Topic: Core Java** 1. Basics of JAVA, Classes & Object, Data Types & Variable, Java Operators, Decision Making, Branching & Looping, Packages, Methods, Constructor, Modifiers, Blocks, Static & Final Keyword, Inner Classes, OOPS Concept in JAVA	10
5	**Topic: Core Java** 1. Exception Handling, String, Thread, Wrapper Classes, Input & Output Stream, Java object Input & Output, Java Array, Java Garbage Collection 2. **Collection Framework in Java**: Set Interface, Set Implementation Classes, List interface, List Implementation Classes, Map Interface, Map implementation Classes, Queue Interface, Queue implementation Classes, Utility Classes, Sorting Collections using utility methods, equals() and hashCode Contract in java collection, overriding equals and hashCode methods in java, Primitive wrapper classes, and all its method APIs	10
6	**Topic: Python** 1. Introduction to Python, Variable & Operator, Control-Flow Statement, Numbers, String, Lists, Tuples, Dictionary, Sets, Function, Module & Packages, Exception Handling, File Input-Output, XML & JSON Parsing, Database Connectivity, Classes & Object	10

REFERENCE BOOKS:
1. Soft Skills & Professional Communication, Francis Peters SJ, McGraw Hill Education
2. Quantitative Aptitude by R.S Agarwal – S. Chand Publication
3. GD-PI Handbook (Communication, Group Discussion, Interviews, GDPI, Essay & E-Mail Writing, Resume Building- in 25 Days) by RatnabhaSaha, Paperback Publications
4. Programming with Java by E. Balagurusamy, McGraw Hill Education

SITES CONSULTED/ E-SOURCES
1. https://timesofindia.indiatimes.com/life-style/relationships/work/Tips-for-a-Personal-Interview/articleshow/51327247.cms
2. https://www.getsetresumes.com/blog/143-difference-between-resume-cv-and-biodata/
3. https://testbook.com/blog/
4. http://www.geeksforgeeks.org/geeksquiz-home/
5. https://www.learnpython.org

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YCCE's CAREER ADVANCEMENT PROGRAMME

VI Semester
AU2129: YCCE's CAREER ADVANCEMENT PROGRAMME (YCAP6.2)

Branch: - Electronics & Telecommunication, Mechanical Engineering, Electronics Engineering

AU2129 YCAP-VI (ME,ETC,EE)	No of Evaluations	Result of successful completion of YCAP VI shall be calculated based on the basis of evaluation.
Evaluation Scheme	EVAL-I	**To pass the exam a students must score 50% marks**
	100 marks	

Objective	Course Outcome
Objectives: The goal of this subject curriculum is to enhance Communication, Technical and Aptitude Skills to make participants ready for Corporate Careers and help them become confident in their classroom participation and other academic activities.	**Outcome:** With the completion of this syllabus Students will be able to face Interviews be comfortable with Java, Python & be able to crack the Campus Recruitment Test with ease. To be able to create desktop applications.

Unit No.	Contents	Max. Hrs.
1	**Topic: Communication Skills** 1. Art of giving effective Introduction in both Physical, Digital & Phygital Interviews **2.** Extempore – How to appear in online Extempore effectively – Tips & discussion on cracking extempore rounds in placements and Extempore Practice **3.** Resume Writing & Review	5
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3	**Topic: Aptitude** 1. Introduction to Quantitative Aptitude Vedic Mathematics – Short Tricks for Multiplication, Square & Cube. 2. Number System – Number Tree, Divisibility Rules, HCF & LCM, Unit Digit Concept, Remainder Theorem. 3. Percentages – Basics of Percentages, Smart Fractions, Successive Increment & Decrement	10

		June 2021	1.00	Applicable for AY 2021-22 Onwards
Chairperson	Dean (Acad. Matters)	Date of Release	Version	

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4	**Topic: Core Java** Basics of JAVA, Classes & Object, Data Types & Variable, Java Operators, Decision Making, Branching & Looping, Packages, Methods, Constructor, Modifiers, Blocks, Static & Final Keyword, Inner Classes, OOPS Concept in JAVA	10
5	**Topic: Core Java** Exception Handling, String, Thread, Wrapper Classes, Input & Output Stream, Java object Input & Output, Java Array, Java Garbage Collection	05
6	**Collection Framework in Java**: Set Interface, Set Implementation Classes, List interface, List Implementation Classes, Map Interface, Map implementation Classes, Queue Interface, Queue implementation Classes, Utility Classes, Sorting Collections using utility methods, equals() and hashCode Contract in java collection, overriding equals and hashCode methods in java, Primitive wrapper classes, and all its method APIs	05

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3. GD-PI Handbook (Communication, Group Discussion, Interviews, GDPI, Essay & E-Mail Writing, Resume Building- in 25 Days) by RatnabhaSaha, Paperback Publications
4. Programming with Java by E. Balagurusamy, McGraw Hill Education

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1. https://timesofindia.indiatimes.com/life-style/relationships/work/Tips-for-a-Personal-Interview/articleshow/51327247.cms
2. https://www.getsetresumes.com/blog/143-difference-between-resume-cv-and-biodata/
3. https://testbook.com/blog/
4. http://www.geeksforgeeks.org/geeksquiz-home/
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YCCE's CAREER ADVANCEMENT PROGRAMME

VI Semester
AU2130: YCCE's CAREER ADVANCEMENT PROGRAMME (YCAP6.3)
Branch: - Computer Technology /Information Technology/Computer Science & Engg.

AU2130 YCAP-VI (CT,IT,CSE)	No of Evaluations	Result of successful completion of YCAP VI shall be calculated based on the basis of evaluation.
Evaluation Scheme	EVAL-I	To pass the exam a students must score 50% marks
	100 marks	

Objective	Course Outcome
Objectives: The goal of this subject curriculum is to enhance Communication, Technical and Aptitude Skills to make participants ready for Corporate Careers and help them become confident in their classroom participation and other academic activities.	**Outcome:** With the completion of this syllabus Students will be able to communicate in English confidently, be comfortable with Advance Java & be able to crack the Campus Recruitment Test with ease. To be a

Unit No.	Contents	Max. Hrs.
1	**Topic: Communication Skills** 1. Art of giving effective Introduction in both Physical, Digital & Phygital Interviews 2. Extempore – How to appear in online Extempore effectively – Tips & discussion on cracking extempore rounds in placements and Extempore Practice **3.** Resume Writing & Review	5
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4	**Topic: Advance Java** 1. Web Programming Introduction, HTML Introduction, HTML Tags, CSS Introduction, Different ways of Implementing CSS, CSS Properties 2. SQL Introduction, My SQL database Installation, SQL quires	6

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B. Tech Audit Course YCAP-VI Syllabus 2021-22

<u>General Engineering</u>

YCCE's CAREER ADVANCEMENT PROGRAMME

5	**Topic: Advance Java**
	  1. **JDBC:** what is JDBC, Introduction, Features of JDBC, JDBC drivers, setting up a database and creating a schema, writing JDBC Code to connect to Database, Types of RowSet & ResultSet in JDBC
	  2. **Servlets:** Introduction to Servlets, HTTP Methods; GET, POST, PUT, DELETE, TRACE, OPTIONS. GET/POST request and difference, Servlet Lifecycle, Servlet Context, and Servlet Config, Forwarding and redirection of requests
		4

6	**Topic: Advance Java**
	  1. **JSP:** Introduction to JSP, Basic HTML tags, JSP Lifecycle, JSP elements- Scriptlet, Expressions, Declarations, Directive in JSP – Page Directive, Include Directive, Taglib Directive, JSP Tag Library: - JSP Standard Actions, Expression Language, JSTL Basic & It's usage, Need for custom Tag Library, Custom Tag Library Implementation
	  2. **Spring Framework:** Introduction to Spring, Spring Architecture Explanation & all Its Component
	  3. Java Web Application Practical Implementation – Hands-on Practice
		10

REFERENCE BOOKS:
1. Soft Skills & Professional Communication, Francis Peters SJ, McGraw Hill Education
2. Quantitative Aptitude by R.S Agarwal – S. Chand Publication
3. GD-PI Handbook (Communication, Group Discussion, Interviews, GDPI, Essay & E-Mail Writing, Resume Building- in 25 Days) by RatnabhaSaha, Paperback Publications
4. Thinking in JAVA by Bruce Eckel

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1. https://timesofindia.indiatimes.com/life-style/relationships/work/Tips-for-a-Personal-Interview/articleshow/51327247.cms
2. https://www.getsetresumes.com/blog/143-difference-between-resume-cv-and-biodata/
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