

**KONGU ENGINEERING COLLEGE, PERUNDURAI - 638060**

**DEPARTMENT OF COMPUTER APPLICATIONS**

**ONE CREDIT COURSE – CIRCULAR**

10.02.2021

This is to inform that, we have planned to conduct one credit courses for this academic year 2020-2021. In this regards, Students are requested to give your willingness on or before 22.02.2021. The details of the one credit courses are given below for your reference.

| S.No | Name of the Course                             | Coordinator(s) &<br>Contact                                      | Course<br>Duration |
|------|------------------------------------------------|------------------------------------------------------------------|--------------------|
| 1.   | Cross Platform APP Development with<br>Flutter | Dr.M.Pyingkodi<br>(9943114104)<br>Mrs.K.Nanthini<br>(9597445565) | 30 Hours           |
| 2.   | GO Programming                                 | Mrs. S.Hemalatha<br>(9786266777)<br>Dr.T.Kavitha<br>(9894514402) | 30 Hours           |

  
HoD/CA

**KONGU ENGINEERING COLLEGE**  
**PERUNDURAI ERODE-638060**  
**(AUTONOMOUS)**

**DEPARTMENT OF COMPUTER APPLICATIONS**

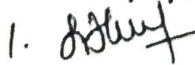
Date: 22.01.2021

**DETAILS OF ONE / TWO CREDIT COURSE**

|     |                                                   |            |                                                                                     |                       |                       |             |
|-----|---------------------------------------------------|------------|-------------------------------------------------------------------------------------|-----------------------|-----------------------|-------------|
| 1.  | Academic Year                                     | :          | 2020-2021                                                                           |                       | Semester : ODD / EVEN |             |
| 2.  | Course Title                                      | :          | Go Programming                                                                      |                       |                       |             |
| 3.  | Type of Course                                    | :          | <del>Already Offered Course</del> / Updated Course / New Course                     |                       |                       |             |
|     | • If "Already offered course",                    | :          | Course Code:                                                                        | Version:              |                       |             |
| 4.  | Course Coordinator(s)                             | :          | 1.Ms.S.Hemalatha, Assistant Professor /CA<br>2.Dr.T.Kavitha, Assistant Professor/CA |                       |                       |             |
| 5.  | Course offered by                                 | :          | Internal faculty / External experts                                                 |                       |                       |             |
| 6.  | Name and designation of external resource persons | :          | -                                                                                   |                       |                       |             |
| 7.  | Details about external organization               | :          | -                                                                                   |                       |                       |             |
| 8.  | Course fee for external experts                   |            | Max. number of students/Batch                                                       |                       | Course fee / student  |             |
|     | Batch I:                                          | NA         | 34                                                                                  |                       | NIL                   |             |
|     | Batch II:                                         | NA         | 37                                                                                  |                       | NIL                   |             |
| 9.  | No. of days                                       | Period     |                                                                                     | No. of hours          |                       | Venue       |
|     |                                                   | From       | To                                                                                  | Lecture               | Practical             |             |
|     |                                                   | 30.01.2020 | 30.04.2020                                                                          | -                     | 30                    | 30          |
| 10. | Pre-requisites for offering the course            | :          | NIL                                                                                 |                       |                       |             |
| 11. | Course offered to                                 | :          | Programme                                                                           | Branch                | Year/Semester         | Regulations |
|     |                                                   |            | MCA                                                                                 | Computer Applications | I / I                 | 2020        |
|     |                                                   |            |                                                                                     |                       |                       |             |
|     |                                                   |            |                                                                                     |                       |                       |             |
|     |                                                   |            |                                                                                     |                       |                       |             |

|     |                             |        |                                                                                                                                                                                                                                                                                         |        |            |
|-----|-----------------------------|--------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|------------|
| 12. | Course Main Contents        | Day 1  | *Write a simple Go code using variables and operators.                                                                                                                                                                                                                                  |        |            |
|     |                             | Day 2  | Write a simple Go code to illustrate the basic data types.                                                                                                                                                                                                                              |        |            |
|     |                             | Day 3  | Write a simple Go program using control flows.                                                                                                                                                                                                                                          |        |            |
|     |                             | Day 4  | Write a Go program using struct.                                                                                                                                                                                                                                                        |        |            |
|     |                             | Day 5  | Write a Go program to illustrate String handling.                                                                                                                                                                                                                                       |        |            |
|     |                             | Day 6  | Write a program in Go for array composite type.                                                                                                                                                                                                                                         |        |            |
|     |                             | Day 7  | Write a Go program in slice composite type.                                                                                                                                                                                                                                             |        |            |
|     |                             | Day 8  | Write a Go program in map composite type.                                                                                                                                                                                                                                               |        |            |
|     |                             | Day 9  | Develop Go programs using functions.                                                                                                                                                                                                                                                    |        |            |
|     |                             | Day 10 | Design Go programs using methods.                                                                                                                                                                                                                                                       |        |            |
|     |                             | Day 11 | Design simple Go program using Interface.                                                                                                                                                                                                                                               |        |            |
|     |                             | Day 12 | Write a Go program using GoRoutines.                                                                                                                                                                                                                                                    |        |            |
|     |                             | Day 13 | Write a Go program using Channels.                                                                                                                                                                                                                                                      |        |            |
|     |                             | Day 14 | Write a Go program using Package.                                                                                                                                                                                                                                                       |        |            |
|     |                             | Day 15 | Design files and directory program in Go.                                                                                                                                                                                                                                               |        |            |
|     |                             |        | Assignment / Project / Case Study/Others: (if any)                                                                                                                                                                                                                                      |        |            |
| 13. | Course Outcomes             | :      | After completing the course the student will be able to:<br>CO1 : construct simple logics using Go basics and composite types.<br>CO2 : apply functions, methods and interface to develop simple applications.<br>CO3 : design applications to implement concurrency and File handling. |        |            |
| 14. | Course Assessment (Min. 2 ) | :      | S. No.                                                                                                                                                                                                                                                                                  | Type   | Max. Marks |
|     |                             |        | 1                                                                                                                                                                                                                                                                                       | CAT -I | 50         |
|     |                             |        | 2                                                                                                                                                                                                                                                                                       | CAT-2  | 50         |
|     |                             |        |                                                                                                                                                                                                                                                                                         |        |            |
|     |                             |        |                                                                                                                                                                                                                                                                                         |        |            |
|     |                             |        |                                                                                                                                                                                                                                                                                         | Total  | 100 Marks  |
| 15. | Any other details           | :      | NIL                                                                                                                                                                                                                                                                                     |        |            |

The above proposal may kindly be approved.

1.  [S. Hemavathi]

2.  [T. Kaviya]  
Course Coordinator(s)

  
HOD 23/11/21

  
CCO/Academic

| L | T | P | Credit |
|---|---|---|--------|
| 0 | 0 | 2 | 1      |

**Preamble** To provide knowledge and skills needed to create, concise, efficient and clean applications in Go with Hands-on sessions.

### List of Exercises / Experiments:

|     |                                                            |
|-----|------------------------------------------------------------|
| 1.  | Write a simple Go code using variables and operators.      |
| 2.  | Write a simple Go code to illustrate the basic data types. |
| 3.  | Write a simple Go program using control flows.             |
| 4.  | Write a Go program using struct.                           |
| 5.  | Write a Go program to illustrate String handling.          |
| 6.  | Write a program in Go for array composite type.            |
| 7.  | Write a Go program in slice composite type.                |
| 8.  | Write a Go program in map composite type.                  |
| 9.  | Develop Go programs using functions.                       |
| 10. | Design Go programs using methods.                          |
| 11. | Design simple Go program using Interface.                  |
| 12. | Write a Go program using GoRoutines.                       |
| 13. | Write a Go program using Channels.                         |
| 14. | Write a Go program using Package.                          |
| 15. | Design files and directory program in Go.                  |

Total: 30

### REFERENCES:

1. Alan A. A. Donovan, Brian W. Kernighan, "The Go Programming Language Paperback" 1<sup>st</sup> Edition, Pearson Education, 2016.
2. Vladimir Vivien, "Learning Go Programming", 1<sup>st</sup> Edition, Ingram short title, 2016.
3. William Kennedy, Brian Ketelsen, Erik St. Martin, "Go in Action", 1<sup>st</sup> Edition, Manning Publications, 2015.

### COURSE OUTCOMES:

On completion of the course, the students will be able to

|     |                                                                        | BT Mapped<br>(Highest Level)     |
|-----|------------------------------------------------------------------------|----------------------------------|
| CO1 | construct simple logics using Go basics and composite types.           | Applying (K3),<br>Precision (S3) |
| CO2 | apply functions, methods and interface to develop simple applications. | Applying (K3),<br>Precision (S3) |
| CO3 | design applications to implement concurrency and File handling.        | Applying (K3),<br>Precision (S3) |

### Mapping of COs with POs and PSOs

| COs/POs | PO1 | PO2 | PO3 | PO4 | PO5 | PO6 | PO7 | PO8 | PO9 | PO10 | PO11 | PO12 | PSO1 | PSO2 |
|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|------|------|------|------|
| CO1     | 3   | 2   | 1   | 1   |     |     |     |     |     |      |      |      | 1    |      |
| CO2     | 3   | 2   | 1   | 1   |     |     |     |     |     |      |      |      | 1    |      |
| CO3     | 3   | 2   | 1   | 1   |     |     |     |     |     |      |      |      | 1    |      |

1 – Slight, 2 – Moderate, 3 – Substantial, BT- Bloom's Taxonomy

### ASSESSMENT PATTERN

| Test / Bloom's Category* | Remembering (K1) % | Understanding (K2) % | Applying (K3) % | Analyzing (K4) % | Evaluating (K5) % | Creating (K6) % | Total % |
|--------------------------|--------------------|----------------------|-----------------|------------------|-------------------|-----------------|---------|
| Assessment1 (50 marks)   | 10                 | 30                   | 60              |                  |                   |                 | 100     |
| Assessment2 (50 marks)   | -                  | -                    | 100             |                  |                   |                 | 100     |



*(F. Kanitha)*

*(S. Hembram)*

Signature of the Chairman

**KONGU ENGINEERING COLLEGE, PERUNDURAI**  
**DEPARTMENT OF COMPUTER APPLICATIONS**  
**ONE CREDIT COURSE - ATTENDANCE SHEET**  
**18VAC60 - Go Programming**  
**ACADEMIC YEAR - 2020-2021 (EVEN SEM)**

| S.No | Roll No. | Name of the Student | Section | No.of days Present | No.of days Absent | % of Attendance |
|------|----------|---------------------|---------|--------------------|-------------------|-----------------|
| 1    | 20MCR002 | Abitha Rajalaxmi P  | A       | 30                 | 2                 | 93.8            |
| 2    | 20MCR004 | Ajay Martin A       | A       | 32                 | 0                 | 100.0           |
| 3    | 20MCR019 | Erajavignesh V      | A       | 32                 | 0                 | 100.0           |
| 4    | 20MCR024 | Gowthami M          | A       | 31                 | 1                 | 96.9            |
| 5    | 20MCR025 | Janani S            | A       | 31                 | 1                 | 96.9            |
| 6    | 20MCR028 | Karthiha K          | A       | 28                 | 4                 | 87.5            |
| 7    | 20MCR029 | Karthik V           | A       | 31                 | 1                 | 96.9            |
| 8    | 20MCR030 | Kavinkumar R        | A       | 28                 | 4                 | 87.5            |
| 9    | 20MCR042 | Manoranjith M       | B       | 29                 | 3                 | 90.6            |
| 10   | 20MCR044 | Mohanapriya G       | B       | 31                 | 1                 | 96.9            |
| 11   | 20MCR045 | Mownika S           | B       | 32                 | 0                 | 100.0           |
| 12   | 20MCR046 | Munish M            | B       | 32                 | 0                 | 100.0           |
| 13   | 20MCR047 | Muthu Kumar S       | B       | 32                 | 0                 | 100.0           |
| 14   | 20MCR049 | Nataraj T           | B       | 32                 | 0                 | 100.0           |
| 15   | 20MCR052 | Naveenkumar G       | B       | 28                 | 4                 | 87.5            |
| 16   | 20MCR054 | Nihila R            | B       | 32                 | 0                 | 100.0           |
| 17   | 20MCR055 | Nithinkumar A       | B       | 30                 | 2                 | 93.8            |
| 18   | 20MCR056 | Pavithra A N        | B       | 32                 | 0                 | 100.0           |
| 19   | 20MCR058 | Priyavraj T         | B       | 31                 | 1                 | 96.9            |
| 20   | 20MCR059 | Ramesh A            | A       | 30                 | 2                 | 93.8            |
| 21   | 20MCR060 | Ranjithkumar M      | B       | 29                 | 3                 | 90.6            |
| 22   | 20MCR061 | Robin G             | B       | 30                 | 2                 | 93.8            |
| 23   | 20MCR064 | Santhosh Shiva K B  | B       | 27                 | 5                 | 84.4            |
| 24   | 20MCR065 | Saravana Kumar R    | B       | 32                 | 0                 | 100.0           |
| 25   | 20MCR066 | Sathishkumar S      | B       | 30                 | 2                 | 93.8            |
| 26   | 20MCR067 | Sathya D            | B       | 32                 | 0                 | 100.0           |
| 27   | 20MCR068 | Shubham Kumar       | B       | 31                 | 1                 | 96.9            |
| 28   | 20MCR069 | Siva Shankar V      | B       | 30                 | 2                 | 93.8            |
| 29   | 20MCR070 | Sowmiya R           | B       | 30                 | 2                 | 93.8            |
| 30   | 20MCR071 | Sowndariya J        | B       | 31                 | 1                 | 96.9            |
| 31   | 20MCR072 | Sriram Babu N K     | B       | 32                 | 0                 | 100.0           |
| 32   | 20MCR073 | Sruthi S            | B       | 28                 | 4                 | 87.5            |
| 33   | 20MCR074 | Subadharsini S      | B       | 32                 | 0                 | 100.0           |
| 34   | 20MCR075 | Sunny Bhushan       | B       | 32                 | 0                 | 100.0           |
| 35   | 20MCR077 | Swetha J            | B       | 32                 | 0                 | 100.0           |
| 36   | 20MCR079 | Vasanth G N         | B       | 32                 | 0                 | 100.0           |
| 37   | 20MCR080 | Vigashini J K       | B       | 31                 | 1                 | 96.9            |
| 38   | 20MCR081 | Vishal Kumar        | B       | 31                 | 1                 | 96.9            |
| 39   | 20MCR082 | Yuvaraj V           | B       | 32                 | 0                 | 100.0           |
| 40   | 20MCR084 | Priyadharshini M B  | B       | 32                 | 0                 | 100.0           |

1. *[Signature]* [S. HEMALATHA]  
 2. *[Signature]* [T. KARTHA]  
 Faculty Co-ordinator(s)

*[Signature]*  
 Head of the Department

**KONGU ENGINEERING COLLEGE, PERUNDURAI**  
**DEPARTMENT OF COMPUTER APPLICATIONS**  
**ONE CREDIT COURSE - MARK SHEET**  
**18VAC60 - Go Programming**  
**ACADEMIC YEAR - 2020-2021 (EVEN SEM)**

| S.No | Roll No. | Name of the Student | Section | CAT1 | CAT2 | TOTAL<br>OUT OF<br>100 | TOTAL<br>OUT OF<br>50 |
|------|----------|---------------------|---------|------|------|------------------------|-----------------------|
| 1    | 20MCR002 | Abitha Rajalaxmi P  | A       | 42   | 48   | 90                     | 45                    |
| 2    | 20MCR004 | Ajay Martin A       | A       | 42   | 50   | 92                     | 46                    |
| 3    | 20MCR019 | Erajavignesh V      | A       | 43   | 47   | 90                     | 45                    |
| 4    | 20MCR024 | Gowthami M          | A       | 40   | 38   | 78                     | 39                    |
| 5    | 20MCR025 | Janani S            | A       | 42   | 43   | 85                     | 42.5                  |
| 6    | 20MCR028 | Karthiha K          | A       | 43   | 40   | 83                     | 41.5                  |
| 7    | 20MCR029 | Karthik V           | A       | 46   | 50   | 96                     | 48                    |
| 8    | 20MCR030 | Kavinkumar R        | A       | 45   | 42   | 87                     | 43.5                  |
| 9    | 20MCR042 | Manoranjith M       | B       | 42   | 45   | 87                     | 43.5                  |
| 10   | 20MCR044 | Mohanapriya G       | B       | 44   | 44   | 88                     | 44                    |
| 11   | 20MCR045 | Mownika S           | B       | 39   | 48   | 87                     | 43.5                  |
| 12   | 20MCR046 | Munish M            | B       | 44   | 47   | 91                     | 45.5                  |
| 13   | 20MCR047 | Muthu Kumar S       | B       | 33   | 34   | 67                     | 33.5                  |
| 14   | 20MCR049 | Nataraj T           | B       | 44   | 47   | 91                     | 45.5                  |
| 15   | 20MCR052 | Naveenkumar G       | B       | 38   | 44   | 82                     | 41                    |
| 16   | 20MCR054 | Nihila R            | B       | 44   | 50   | 94                     | 47                    |
| 17   | 20MCR055 | Nithinkumar A       | B       | 44   | 44   | 88                     | 44                    |
| 18   | 20MCR056 | Pavithra A N        | B       | 42   | 46   | 88                     | 44                    |
| 19   | 20MCR058 | Priyshivraj T       | B       | 42   | 44   | 86                     | 43                    |
| 20   | 20MCR059 | Ramesh A            | A       | 41   | 48   | 89                     | 44.5                  |
| 21   | 20MCR060 | Ranjithkumar M      | B       | 45   | 50   | 95                     | 47.5                  |
| 22   | 20MCR061 | Robin G             | B       | 46   | 50   | 96                     | 48                    |
| 23   | 20MCR064 | Santhosh Shiva K B  | B       | 34   | 44   | 78                     | 39                    |
| 24   | 20MCR065 | Saravana Kumar R    | B       | 46   | 50   | 96                     | 48                    |
| 25   | 20MCR066 | Sathishkumar S      | B       | 42   | 45   | 87                     | 43.5                  |
| 26   | 20MCR067 | Sathya D            | B       | 37   | 46   | 83                     | 41.5                  |
| 27   | 20MCR068 | Shubham Kumar       | B       | 41   | 50   | 91                     | 45.5                  |
| 28   | 20MCR069 | Siva Shankar V      | B       | 44   | 35   | 79                     | 39.5                  |
| 29   | 20MCR070 | Sowmiya R           | B       | 44   | 48   | 92                     | 46                    |
| 30   | 20MCR071 | Sowndariya J        | B       | 44   | 48   | 92                     | 46                    |
| 31   | 20MCR072 | Sriram Babu N K     | B       | 46   | 50   | 96                     | 48                    |
| 32   | 20MCR073 | Sruthi S            | B       | 46   | 50   | 96                     | 48                    |
| 33   | 20MCR074 | Subadharsini S      | B       | 44   | 50   | 94                     | 47                    |
| 34   | 20MCR075 | Sunny Bhushan       | B       | 37   | 42   | 79                     | 39.5                  |
| 35   | 20MCR077 | Swetha J            | B       | 39   | 50   | 89                     | 44.5                  |
| 36   | 20MCR079 | Vasanth G N         | B       | 38   | 48   | 86                     | 43                    |
| 37   | 20MCR080 | Vigashini J K       | B       | 36   | 44   | 80                     | 40                    |
| 38   | 20MCR081 | Vishal Kumar        | B       | 38   | 48   | 86                     | 43                    |
| 39   | 20MCR082 | Yuvaraj V           | B       | 46   | 50   | 96                     | 48                    |
| 40   | 20MCR084 | Priyadharshini M B  | B       | 46   | 50   | 96                     | 48                    |

1. *[Signature]* [S. HEMALATHA]

2. *[Signature]* [T. Kavitha]  
Faculty Co-ordinator(s)

*[Signature]*  
Head of the Department