



**Karnataka State Akkamahadevi Women University Vijayapura**  
**PO, PSO and CO List**

Sl.No	Department	Link
1	Kannada	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Kannada-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Kannada-PO-PSO-and-CO.pdf</a>
2	English	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/English-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/English-PO-PSO-and-CO.pdf</a>
3	Hindi	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Hindi-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Hindi-PO-PSO-and-CO.pdf</a>
4	Urdu	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Urdu-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Urdu-PO-PSO-and-CO.pdf</a>
5	Music	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Music-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Music-PO-PSO-and-CO.pdf</a>
6	Economics	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Economics-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Economics-PO-PSO-and-CO.pdf</a>
7	History	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/History-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/History-PO-PSO-and-CO.pdf</a>
8	Journalism & Mass Communication	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/JMC-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/JMC-PO-PSO-and-CO.pdf</a>
9	Library & Information Science	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/MLISc-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/MLISc-PO-PSO-and-CO.pdf</a>
10	Social Work	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/MSW-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/MSW-PO-PSO-and-CO.pdf</a>
11	Sociology	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Sociology-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Sociology-PO-PSO-and-CO.pdf</a>
12	Women Studies	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Women-Studies-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Women-Studies-PO-PSO-and-CO.pdf</a>
13	Political Science	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Political-Science-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Political-Science-PO-PSO-and-CO.pdf</a>
14	Physics	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Physics-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Physics-PO-PSO-and-CO.pdf</a>
15	Chemistry	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Chemistry-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Chemistry-PO-PSO-and-CO.pdf</a>
16	Mathematics	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Mathematics-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Mathematics-PO-PSO-and-CO.pdf</a>
17	Botany	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Botany-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Botany-PO-PSO-and-CO.pdf</a>
18	Zoology	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Zoology-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Zoology-PO-PSO-and-CO.pdf</a>
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20	Statistics	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Statistics-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Statistics-PO-PSO-and-CO.pdf</a>
21	Electronics	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Electronics-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Electronics-PO-PSO-and-CO.pdf</a>
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23	Food Processing & Nutrition	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/FPN-PO-PSO-CO-Syllabus.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/FPN-PO-PSO-CO-Syllabus.pdf</a>
24	Bio-Informatics	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Bio-Informatics-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Bio-Informatics-PO-PSO-and-CO.pdf</a>
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26	Commerce	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Commerce-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Commerce-PO-PSO-and-CO.pdf</a>
27	Management Studies	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/MBA-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/MBA-PO-PSO-and-CO.pdf</a>
28	Education	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Education-PO-PSO-and-Co.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Education-PO-PSO-and-Co.pdf</a>
29	Physical Education	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Physical-Education-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/Physical-Education-PO-PSO-and-CO.pdf</a>
30	PGDCM	<a href="http://ka.kswu.ac.in/Uploads/PO-PSO-CO/PGDCM-PO-PSO-and-CO.pdf">http://ka.kswu.ac.in/Uploads/PO-PSO-CO/PGDCM-PO-PSO-and-CO.pdf</a>

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INTERNAL QUALITY ASSURANCE CELL

## Procedure for attaining COs, POs/PSOs and PEOs

1. Departmental committee will finalize course outcomes for each course after the series of discussions with all the teachers of the department.

### 2. Procedure for attainment of COs:

Course outcomes will be attained through direct and indirect methods.

- Direct Attainment: We will consider the following criteria in the direct attainment
  - ◆ Two Internal tests will be conducted based on COs
  - ◆ Class performance activities consisting of assignments / tutorials/ experiments/quiz/any other activity related to COs will be conducted
  - ◆ External exam marks will be considered.
- Indirect Attainment: In this method, we consider the feedbacks of students, parents, alumni and parents on the framed questionnaires.

A common format of programmed excel sheet will be used for finding the average attainment of Cos.

The following table shows the three target levels: Low, Moderate and High attainment for direct and indirect methods

Level	Average Percentage Level
1 (Low)	41-50%
2 (Moderate)	51-60%
3 (High)	61% and above

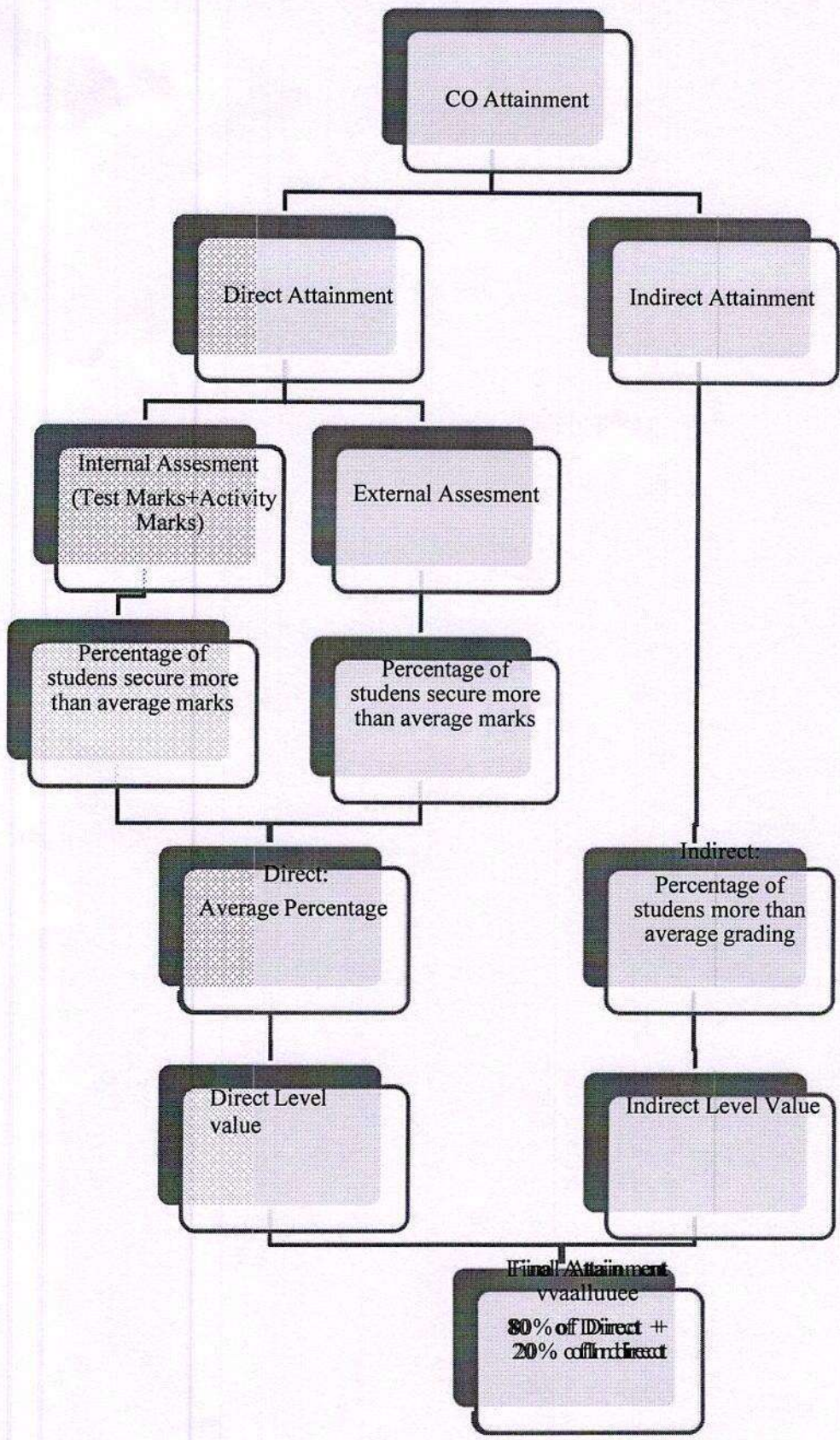
2.4 Target level for attainment of Cos will be set based on average marks of that course in the previous academic year.

Attainment Level Calculation for each CO=

80% of direct level + 20% of indirect level of that CO

Attainment level of all course outcomes of a course will be displayed in a table format.

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### 3. CO-PO Mapping:

Each Course outcome will be mapped to one or more suitable POs

### 4. Procedure for attainment of POs/PSOs:

Program outcomes will be attained through direct and indirect methods.

• Direct Attainment: We will consider all the courses which are mapped to a particular PO. Then the direct attainment value will be calculated based on the following formula:

$$\text{Direct PO Attainment} = \frac{\text{Sum of the average attainment level of the course outcomes mapped to a PO}}{\text{Total number of courses}}$$

• Indirect Attainment: In this method, we consider the feedbacks of students, parents, alumni and parents on the framed questionnaires.

Final PO attainment = 80% of Direct attainment + 20% Indirect attainment

The following table shows the five target levels:

Level	PO attainment range
1 (Poor)	$0.5 \leq \text{PO attainment value} < 1$
2 (Average)	$1 \leq \text{PO attainment value} < 1.5$
3 (Good)	$1.5 \leq \text{PO attainment value} < 2$
4 (Very Good)	$2 \leq \text{PO attainment value} < 2.5$
5 (Excellent)	$2.5 \leq \text{PO attainment value} \leq 3$

Target levels for attainment of POs/PSOs will be set based on the performance of the previous year.

4.4 Same procedure will be used for obtaining attainment of PSOs.

### 5. Procedure for attainment of PEOs:

We map POs and PSOs with suitable PEOs.

$$\text{Direct attainment of PEO} = \frac{\text{Sum of the attainment level of POs and PSOs mapped to a PEO}}{\text{Total number of POs and PSOs}}$$

Indirect attainment of PEOs is based on the feedbacks of students, parents, alumni and parents on the framed questionnaires.

Final PEO attainment = 80% of Direct attainment + 20% Indirect attainment

  
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6. Attainment of Mission is calculated by mapping PEO's with the Mission statements and assigning the scores.

7. The achievement of vision is evaluated on the basis of Mission attainment values.

8. The sample of CO- PO Mapping, Sample Calculation of CO PO attainment are shown below

**CO-PO Mapping**

Course Name and code	CO/PO	PO1	PO2	PO3	PO4	PO5
Group Theory MTU 101	CO1	✓	✓		✓	✓
	CO2	✓		✓		✓
	CO3	✓	✓			✓
	CO4	✓	✓	✓	✓	
Real Analysis MTU 102	CO1		✓			✓
	CO2	✓		✓		✓
	CO3		✓			
	CO4	✓	✓	✓		
Complex Analysis MTU 103	CO1	✓	✓		✓	✓
	CO2	✓		✓		✓
	CO3		✓			✓
	CO4	✓	✓	✓	✓	
Ordinary Differential Equations MTU 104	CO1	✓	✓			✓
	CO2			✓		✓
	CO3	✓	✓			
	CO4	✓	✓	✓		
Advanced Discrete Mathematics MTU 105	CO1	✓	✓		✓	✓
	CO2	✓		✓		✓
	CO3		✓			✓
	CO4	✓	✓	✓	✓	
Introduction to Probability MTU 106	CO1		✓			✓
	CO2	✓		✓		✓
	CO3	✓	✓			
	CO4	✓	✓	✓		



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**CO Attainment of a course**

	Internal Average	Extenal Average	Direct	Level	Indirect	Level	Attainment 80% of direct+ 20%of indirect
CO1	53.57	62	57.785	2	70	3	2.2
CO2	55	62	58.5	2	85	3	2.2
CO3	60	62	61	3	90	3	3
CO4	63	62	62.5	3	65	3	3
Group Theory Course outcome Attainment							2.6

**CO attainment verification**

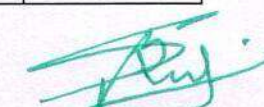
Course Name	Course code	CO Target Level	CO attainment Level	Fully attained or not	Action taken
Group Theory	MTU 101	2	2.6	Fully attained	
Real Analysis	MTU 102	2	2.4	Fully attained	
Complex Analysis	MTU 103	2	2.5	Fully attained	
Ordinary Differential Equations	MTU 104	3	2.8	Not attained	More focus on end term examination
Advanced Discrete Mathematics	MTU 105	3	2.4	Not attained	Set the target level to 2
Introduction to Probability	MTU 106	2	2.2	Fully attained	

**PO attainment verification**

PO's	PO Target Level	PO attainment Level	Fully Attained or not	Action taken
PO1	4	2.55	Fully Attained	
PO2	5	2.53	Fully Attained	
PO3	4	2.54	Fully Attained	
PO4	4	2.74	Fully Attained	Set higher level
PO5	5	2.42	Not attained excellent but reached to very good	

**Program Educational Objectives**

PEO's	PEO Target Level	PEO attainment Level	Fully attained or not	Action taken
PEO1	2			
PEO2	3			
PEO3	2			
PEO4	3			
PEO5	3			



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