

IPO ATTAINMENT

Integrated Program Outcome (iPO) attainment is assessed at the end of semester by

- Individual (student)
- Program

per semester or accumulatively.

DATA IPO TAKEN FROM SMP



IPO ATTAINMENT CALCULATION

$$PO_j = \frac{\sum_{i=1}^n w_i c_i p_i}{\sum_{i=1}^n w_i c_i}$$

w_i – assessment component weights of PO_j in course i

c_i – credit of course i

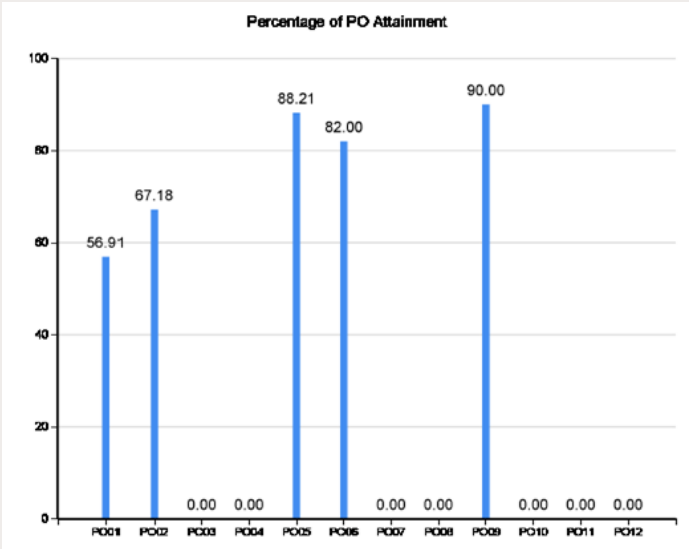
p_i – marks obtained for assessment component PO_j in course i (100%)

n – number of courses that are mapped onto PO_j

EXAMPLE CALCULATION

By Individual (Student)

Student X		Credit, c	% marks obtained, p					Weight, w				
Code	Course	Credit	PO1	PO2	PO5	PO6	PO9	PO1	PO2	PO5	PO6	PO9
BEKG 1123	PRINCIPLES OF ELECTRIC AND ELECTRONICS	3	40.12					100.0				
BLHL 1112	ARABIC I	2					90.00					100.0
BITG1233	COMPUTER PROGRAMMING	3	52.64		88.21			90.0		10.0		
BMFG1213	ENGINEERING MATERIALS	3	62.00	67.18				30.0	70.0			
BMFG1313	ENGINEERING MATHEMATICS I	3	76.00					100.0				
BKKB 1331	ATHLETICS	1				82.00					100.0	
				$\sum c * w$				960	210	30	100	200
				$\sum c * w * p$				54628.8	14107.8	2646.3	8200.0	18000.0
				Accumulative PO attainment $\frac{\sum c * w * p}{\sum c * w} \%$				56.91	67.18	88.21	82.00	90.00



By Program (Accumulative)

Code	Course	Credit c	PO ₄ Attainment p	Weights, w	c*w	c*w*p
BEKE 3533	ELECTRICAL MACHINES	3	94.04	30	90.0	8463.6
BEKC 3543	MICROPROCESSOR	3	89.78	42.5	127.5	11447
BEKB 3551	ELECTRICAL ENGINEERING LABORATORY III	1	98.77	37	37.0	3654.49
BEKU 4792	FINAL YEAR PROJECT I	2	93.94	34	68.0	6387.92
BEKE 4753	ELECTRICAL DRIVES	3	42.13	20	60.0	2527.8
BEKB 4761	ELECTRICAL ENGINEERING LABORATORY IV	1	94.81	15	15.0	1422.15
BEKU 4894	FINAL YEAR PROJECT II	4	91.74	24	96.0	8807.04
BEKP 4853	ENERGY UTILIZATION AND CONSERVATION	3	64.15	25	75.0	4811.25
	TOTAL				568.5	47521.2

$$PO_4 = \frac{\sum_{i=1}^8 w_i c_i p_i}{\sum_{i=1}^8 w_i c_i} = \frac{47521.2}{568.5} = 83.59$$