

**TECHNICAL EDUCATION
QUALITY IMPROVEMENT PROGRAMME**

KEY PERFORMANCE INDICATORS
(DECEMBER 2004)



UNIVERSITY COLLEGE OF ENGINEERING
(AUTONOMOUS)
OSMANIA UNIVERSITY, HYDERABAD – 500 007.

OUTPUT INDICATORS

Note: Unless specified, give data in numbers. Where financial information is required give value in Rs. Lakh

S. No.	Indicators		Baseline Date June 2003		June 05	June 06	June 07	June 08
1.	Increased number of high quality graduates (first degree) in relevant and cutting edge technologies	All (relevant) Engineering Disciplines including Cutting Edge Technology	A 217	B 126	B5 152	B6 167	B7 184	B8 202
		Cutting Edge Technology Disciplines only	C 88	D 64	D5 77	D6 84	D7 92	D8 101
<ul style="list-style-type: none"> High quality graduates are those who score 75% or more marks or equivalent GPA in the aggregate at graduation. Example of cutting edge technology disciplines are: Electronics & Communications, Computer Science & Engineering, Information Technology, Biotechnology, Bio-informatics, Bio-medical Engineering, etc. At A, give the total number of students that graduated in all engineering disciplines in 2003. At B, give the total number of graduates who were of high quality (as defined above) from the batch graduating in 2002 or 2003. At B4, B5, B6, B7 and B8, give the increased number of high quality graduates; the increase in each year should be about 10% of the value at B (if for example the value at B is 30, then the increased values in the subsequent years would be 33, 36, 39, 42 and 45). Following the above guidelines, please give the values for C, D, D4....D8. 								
			Baseline Date June 2003		June 05	June 06	June 07	June 08
2.	Increased number of students completing in engineering disciplines	Master's degree	136		162	175	190	210
		Doctoral degree	6		3	6	6	8
<ul style="list-style-type: none"> At M and P, give the number of students who completed Master's and Doctoral program is 2003, and for the subsequent years, give the expected increased number of students obtaining Master's and Doctorate degrees. 								

			Baseline Date (June 2003)	June 05	June 06	June 07	June 08	
3.	Increased professional outputs	Publications (Number)	40	60	70	80	100	
		Academic Products (Number)	4	8	10	12	14	
		R & D Products of Commercial use (Number)	2	4	6	6	8	
		Patents (obtained / applied for) (Number)	Nil	2	4	4	6	
<ul style="list-style-type: none"> • Please give baseline data for 2003 only. • Give the anticipated increased numbers for the subsequent years. • Under Publications, include all papers published in refereed journals and those presented in National and International Conferences (papers could be research papers, invited review papers, etc.). Popular articles, newspapers articles and radio / TV talks should be excluded. • Under Academic product include books, monographs, conference proceedings and educational software. 								
			Baseline Date (June 2003)	June 05	June 06	June 07	June 08	
4.	Number of Joint programs / activities	Externally funded research, design and development projects (both ongoing and completed)	7	6	7	8	12	
		Consultancy assignments (both ongoing and completed)	Nos. 8	Value Rs. 1.100 Millions	13/1.4	14/1.6	15/1.8	16/2.0
		Publications	30	34	36	38	40	
		Training programs conducted	10	16	20	22	24	
		Joint research guidance at Ph.D. level	4	2	3	3	5	
<ul style="list-style-type: none"> • Joint programs are those that are carried out jointly by two or more networked institutions. • Under publications, include jointly published papers, books, monographs and conference proceedings and educational software developed. • Give base value for 2003 only. • Give the anticipated increased numbers in the subsequently years. 								

		FY	2004-05	2005-06	2006-07	2007-08	
5.	Increased revenue generation (Rs. In Millions) RC	43.50	45.60	48.00	50.00	52.00	
	IRG	38.90	47.10	49.00	52.00	54.00	
<ul style="list-style-type: none"> Against RC, give the total recurring expenditure during FY 2003-04. Against IRG, give the total internal revenue generated during FY 2003-04. IRG is to include income from all sources including tuition fees and other charges collected from students. For subsequent Financial years, give the anticipated increased values of IRG that would be generated. 							
6.	Services to Community & Economy	Baseline Date (June 2003)	June 05	June 06	June 07	June 08	
	a) Total No. of Programmes	5	12	16	20	24	
	b) Total No. of Participants of all types	150	250	300	350	400	
	Increased access to technical training for socially disadvantaged groups and unemployed youth	a) Total No. of Participants from socially disadvantaged groups	100	170	200	225	265
		b) Total No. of unemployed youth	130	200	240	275	300
	Increased assistance to unorganized sector	a) Total No. of programmes	5	6	8	10	12
		b) Total No. of Participants	150	180	240	250	300
		c) Total No. of Beneficiaries	120	170	200	225	265
<ul style="list-style-type: none"> Give baseline data for 2003-2004. Give expected increased numbers for the subsequent years. 							

		Baseline Date (June 2003)	June 05	June 06	June 07	June 08
7.	Increased availability of well-trained institution managers	0	8	12	16	20
<ul style="list-style-type: none"> • Institution managers would include Head of Institution, Deans, Heads of Departments, Registrar, Deputy Registrar, Comptroller / Finance Officer, Training & Placement Office, etc. • Well-trained implies those who have undergone formal training. • Give baseline data for the numbers available within the institutions in June 2003. • Give expected increased numbers for the subsequent years. 						

OUTCOME INDICATORS

S. No.	Indicators		Baseline Date June 2003	June 05	June 06	June 07	June 08
		Employed through campus interviews	116	155	190	250	270
		Employed through other means	NA	NA	NA	NA	NA
<ul style="list-style-type: none"> This data is to be given for each network for 2002-2003. Lead institutions should collect information from their partner institutions and aggregate the values as the case may be. Give the expected increased values for the subsequent years. 							
3.	Networking		Baseline Date June 2003	June 05	June 06	June 07	June 08
		No. of faculty - days loaned for academic activities	60	100	120	150	180
		No. of student-days for which students sent to other institutions for curricular and	Nil	15	20	25	30
		Joint projects, consultancies, training programs, publications, seminars, workshops etc.	4	10	12	15	20
		Joint M.Tech. and Ph.D. programs	Nil	2	3	4	5
		No. of person-days for which labs, workshops and libraries utilized by faculty and students from other institutions which the same network	30	50	60	70	80
<ul style="list-style-type: none"> This data is to be given for each network for 2002-2003. Lead institutions should collect information from their partner institutions and aggregate the values as the case may be. Give the expected increased values for the subsequent years. 							

			Baseline Date June 2003	June 05	June 06	June 07	June 08
4.	Improved internal efficiency of the engineering education system	1. No. of teaching days in an academic year	180 days	180	180	180	180
		2. No. of days of slippage from the announced academic calendar	Nil-Any loss is compensated on Saturdays	Nil	Nil	Nil	Nil
		3. No. of days for completing the admission process	45 days	40	35	35	30
		4. Average No. of days taken for fee processing	7-days	7	6	4	1
		5. No. of days for completion of semester / annual examination	30 days/ Sem.	21	21	15	15
		6. No. of days for declaring results	30 days	30	25	20	15
		7. Average No. of Departments that Develop & Maintain question bank	2	4	5	6	6
		8. Office expenditure (excluding amount spent on maintenance of equipment and infrastructure)	Rs 0.400 Millions	1.200	1.400	1.500	1.800
		9. Average time taken to order equipment (from advertisement to supply / installation of equipment)	60 days	40	30	25	20
		10. Computerized maintenance of student record	Rs 0.300 Millions	0.400	0.800	0.800	0.600
		11. Ratio of non-teaching staff of faculty	2:1	2:1	2:1	2:1	2:1
		12. Computerized maintenance of employee record	Rs. Nil	0.400	0.500	0.400	0.400

		13. Average number of days taken for recruitment (from date of advertisement to date of offer of appointment)	Medium	Med.	Med.	Med.	Med.
		14. Average of No. of faculty that are computer literate	High	High	High	V. High	V. High
		14.a. Staff	Low	Low	Med.	Med.	High
		15. Extent of computerization of administrative and financial process	V. Low	Low	Med.	High	V. High
		16. Degree of decentralization of decision making	Med.	Med.	Med.	High	V. High
<ul style="list-style-type: none"> • The data should be given for each institution. For baseline data, the period / year for which required has been indicated. • Give the expected changed values for subsequent years. • For the last 4 parameters, give base and changed values in subjective terms – very low, low, medium, high, very high 							
			Baseline Date June 2003	June 05	June 06	June 07	June 08
5.	Increased involvement of institutions with communities	No. of interactions with community	2	3	4	5	6
		No. of need / demand-based service programs carried out	Nil	4	6	8	10
		No. of technologies transferred	6	10	12	14	16
		No. of beneficiaries from skill-based training programs	30	60	90	120	150
<ul style="list-style-type: none"> • Baseline values to be given for 2003-04. • Interactions with community to include interaction both within and outside the institution for the purpose of assessing community needs, identifying programs, preparing action plans for service programs. This should also include follow-up visits after completion of service programs and transfer of technologies. 							

**MEMORANDUM OF UNDERSTANDING
BETWEEN
UNIVERSITY COLLEGE OF ENGINEERING
OSMANIA UNIVERSITY, HYDERABAD
AND
SRINIDHI INSTITUTE OF TECHNOLOGY, R. R. DIST.**

1.0 Background:

The Government of India (GoI) has decided to bring in systemic transformation of Technical Education in India. This is to be achieved through intensive drive for excellence in the engineering colleges and polytechnics to make the system demand driven, quality conscious and responsive to rapid economic and technological changes occurring both at national and international levels. The system has to be expanded not only to address the needs of organized sector but also to cover the needs of unorganized and rural sectors with its relevance to productivity.

The Technical Education Quality Improvement Project (TEQIP) undertaken by GoI proposes to stimulate emergence of already well performing institutions into lead centers for self-sustaining excellence over the project period and develop multilateral synergistic network with neighboring institutions.

The National Project Implementation Unit (NPIU), implementing agency for TEQIP, has selected University College of Engineering, Osmania University, Hyderabad as lead institute and Srinidhi Institute of Technology, R.R. Dist. as network institute for participation in the project.

2.0 Project Aim

To develop a formal network for bi-directional sharing of the expertise and resources to improve the performance of teaching-learning process to such a level that the institutes emerge as Centers of Excellence in Technical Education, Training and Research.

3.0 The Understanding

University College of Engineering, Osmania University, Hyderabad as lead institution, and Srinidhi Institute of Technology, R. R. Dist. as network institute under TEQIP jointly through this Memorandum of Understanding (MoU) decide to undertake various activities as listed below (suggested):

- a) Maintain career, interest and competency profiles of faculty members
- b) Organize lectures of experts of UCE OU institute for students of SNIST institute
- c) Organizing workshop to non-teaching laboratory staff
- d) Make available library and learning resources to visiting faculty
- e) Develop and work on joint proposal of research and consultancy
- f) Organize jointly continuing education program for professionals
- g) Organize seminars, conferences and workshops on topics of general interest
- h) Organize training and lectures on emerging and thrust areas
- i) Share and assist in curriculum development
- j) Nominate faculty members of each institute to academic bodies of other institutes
- k) Make arrangement of stay in hostel for visiting faculty
- l) Provide help to develop mutual relations with institutes, industry, non-government organization and local bodies to provide the service to community and economy.

For implementing and monitoring of Project University College of Engineering, Osmania University and Srinidhi Institute of Technology also agree that:

- a) The networking between University College of Engineering, Osmania University and Srinidhi Institute of Technology will be implemented by, created by creating a Networking Coordination Cell both at University College of Engineering, Osmania University and Srinidhi Institute of Technology
- b) Each such cell will be headed by a faculty nominated by the Principals of the University College of Engineering, Osmania University and Srinidhi Institute of Technology who shall be designated as network coordinator and whose main responsibility will be to execute and coordinate all activities envisaged under this MoU.
- c) University College of Engineering, Osmania University and Srinidhi Institute of Technology will constitute a Network Coordinator Committee (NCC) for regular monitoring of the activities and achieving the set targets. The committee will meet at least once in six months and review the progress.
- d) The composition of the committee shall be the following:

i. Principal & Secretary / Director, Univ. College of Engg., OU	Chairman
ii. Principal, Srinidhi Institute of Technology	Member
iii. One Professor of Univ. College of Engg., OU	Member
iv. One Professor of Srinidhi Institute of Technology	Member
v. Network Coordinator, Univ. College of Engg., OU	Member
vi. Network Coordinator, Srinidhi Institute of Technology	Member
vii. One SPFU Officer nominated by SPFU Head	Member

- e) The Networking Coordinators from University College of Engineering and Srinidhi Institute of Technology will meet at least one in three months to assess the benefits of networking and re resolve any problems that are being faced. A networking progress report will be prepared by the Network Coordinators on a quarterly basis, which will be submitted to SPFU Head for onward transmission to NPIU.

Regarding the financial agreements during the project implementation; University College of Engineering, Osmania University and Srinidhi Institute of Technology further agree to:

- a) Both the institutes will engage services of the existing faculty and staff for networking arrangement and no additional staff will be provided. Such staff will not be provided any honorarium
- b) Both the institutes will utilize existing infrastructure for networking arrangement and will create new facilities at the cost of TEQIP
- c) All expenses in connection with implementation and monitoring such as TA / DA, boarding / lodging and conveyance of students / faculty / researchers will be borne by TEQIP

4.0 Settlement of Disputes

In case of any dispute / differences of opinion or any such matter, decision of the Head of the SPFU will be final and binding on both the parties concerned.

5.0 Termination of MoU

If necessary, NCC will meet review the contents of the MoU and will expand the scope of the MoU as per requirement. The MoU can be terminated by mutual consent of the parties involved with permission from SPFU / NPIU.

Signature on behalf of
University College of Engineering, Osmania University, Hyderabad

Signed on behalf of
Srinidhi Institute of Technology, R.R. Dist.

In presence of
Project Director, SPFU, Andhra Pradesh State

**MEMORANDUM OF UNDERSTANDING
BETWEEN
UNIVERSITY COLLEGE OF ENGINEERING
OSMANIA UNIVERSITY, HYDERABAD
AND
COLLEGE OF TECHNOLOGY, OSMANIA UNIVERSITY**

1.0 Background:

The Government of India (GoI) has decided to bring in systemic transformation of Technical Education in India. This is to be achieved through intensive drive for excellence in the engineering colleges and polytechnics to make the system demand driven, quality conscious and responsive to rapid economic and technological changes occurring both at national and international levels. The system has to be expanded not only to address the needs of organized sector but also to cover the needs of unorganized and rural sectors with its relevance to productivity.

The Technical Education Quality Improvement Project (TEQIP) undertaken by GoI proposes to stimulate emergence of already well performing institutions into lead centers for self-sustaining excellence over the project period and develop multilateral synergistic network with neighboring institutions.

The National Project Implementation Unit (NPIU), implementing agency for TEQIP, has selected University College of Engineering, Osmania University, Hyderabad as lead institute and College of Technology, Osmania University as network institute for participation in the project.

2.0 Project Aim

To develop a formal network for bi-directional sharing of the expertise and resources to improve the performance of teaching-learning process to such a level that the institutes emerge as Centers of Excellence in Technical Education, Training and Research.

3.0 The Understanding

University College of Engineering, Osmania University, Hyderabad as lead institution, and College of Technology, Osmania University as network institute under TEQIP jointly through this Memorandum of Understanding (MoU) decide to undertake various activities as listed below (suggested):

- a) Maintain career, interest and competency profiles of faculty members
- b) Organize lectures of experts of UCE OU institute for students of OUCT other institute
- c) Organizing workshop to non-teaching laboratory staff
- d) Make available library and learning resources to visiting faculty
- e) Develop and work on joint proposal of research and consultancy
- f) Organize jointly continuing education program for professionals
- g) Organize seminars, conferences and workshops on topics of general interest
- h) Organize training and lectures on emerging and thrust areas
- i) Share and assist in curriculum development
- j) Nominate faculty members of each institute to academic bodies of other institutes
- k) Make arrangement of stay in hostel for visiting faculty
- l) Provide help to develop mutual relations with institutes, industry, non-government organization and local bodies to provide the service to community and economy.

For implementing and monitoring of Project University College of Engineering, Osmania University and College of Technology, Osmania University also agree that:

- a) The networking between University College of Engineering, Osmania University and College of Technology, Osmania University will be implemented by, created by creating a Networking Coordination Cell both at University College of Engineering, Osmania University and College of Technology, Osmania University
- b) Each such cell will be headed by a faculty nominated by the Principals of the University College of Engineering, Osmania University and College of Technology, Osmania University who shall be designated as network coordinator and whose main responsibility will be to execute and coordinate all activities envisaged under this MoU.
- c) University College of Engineering, Osmania University and College of Technology, Osmania University will constitute a Network Coordinator Committee (NCC) for regular monitoring of the activities and achieving the set targets. The committee will meet at least once in six months and review the progress.
- d) The composition of the committee shall be the following:

i. Principal & Secretary / Director, Univ. College of Engg., OU	Chairman
ii. Principal, College of Technology, OU	Member
iii. One Professor of Univ. College of Engg., OU	Member
iv. One Professor of College of Technology, OU	Member
v. Network Coordinator, Univ. College of Engg., OU	Member
vi. Network Coordinator, College of Technology, OU	Member
vii. One SPFU Officer nominated by SPFU Head	Member

- e) The Networking Coordinators from University College of Engineering and College of Technology, Osmania University will meet at least one in three months to assess the benefits of networking and re resolve any problems that are being faced. A networking progress report will be prepared by the Network Coordinators on a quarterly basis, which will be submitted to SPFU Head for onward transmission to NPIU.

Regarding the financial agreements during the project implementation; University College of Engineering, Osmania University and College of Technology, Osmania University further agree to:

- a) Both the institutes will engage services of the existing faculty and staff for networking arrangement and no additional staff will be provided. Such staff will not be provided any honorarium
- b) Both the institutes will utilize existing infrastructure for networking arrangement and will create new facilities at the cost of TEQIP
- c) All expenses in connection with implementation and monitoring such as TA / DA, boarding / lodging and conveyance of students / faculty / researchers will be borne by TEQIP

4.0 Settlement of Disputes

In case of any dispute / differences of opinion or any such mater, decision of the Head of the SPFU will be final and binding on both the parties concerned.

5.0 Termination of MoU

If necessary, NCC will meet review the contents of the MoU and will expand the scope of the MoU as per requirement. The MoU can be terminated by mutual consent of the parties involved with permission form SPFU / NPIU.

Signature on behalf of
University College of Engineering, Osmania University, Hyderabad

Signed on behalf of
College of Technology, Osmania University

In presence of
Project Director, SPFU, Andhra Pradesh State

**MEMORANDUM OF UNDERSTANDING
BETWEEN
UNIVERSITY COLLEGE OF ENGINEERING
OSMANIA UNIVERSITY, HYDERABAD
AND
RGIT, NANDYAL**

1.0 Background:

The Government of India (GoI) has decided to bring in systemic transformation of Technical Education in India. This is to be achieved through intensive drive for excellence in the engineering colleges and polytechnics to make the system demand driven, quality conscious and responsive to rapid economic and technological changes occurring both at national and international levels. The system has to be expanded not only to address the needs of organized sector but also to cover the needs of unorganized and rural sectors with its relevance to productivity.

The Technical Education Quality Improvement Project (TEQIP) undertaken by GoI proposes to stimulate emergence of already well performing institutions into lead centers for self-sustaining excellence over the project period and develop multilateral synergistic network with neighboring institutions.

The National Project Implementation Unit (NPIU), implementing agency for TEQIP, has selected University College of Engineering (UCE), Osmania University (OU), Hyderabad as lead institute and RGIT, Nandyal as network institute for participation in the project.

2.0 Project Aim

To develop a formal network for bi-directional sharing of the expertise and resources to improve the performance of teaching-learning process to such a level that the institutes emerge as Centers of Excellence in Technical Education, Training and Research.

3.0 The Understanding

University College of Engineering, Osmania University, Hyderabad as lead institution, and RGIT, Nandyal as network institute under TEQIP jointly through this Memorandum of Understanding (MoU) decide to undertake various activities as listed below (suggested):

- a) Maintain career, interest and competency profiles of faculty members
- b) Organize lectures of experts of UCEO institute for students of RJIT institute
- c) Organizing workshop to non-teaching laboratory staff
- d) Make available library and learning resources to visiting faculty
- e) Develop and work on joint proposal of research and consultancy
- f) Organize jointly continuing education program for professionals
- g) Organize seminars, conferences and workshops on topics of general interest
- h) Organize training and lectures on emerging and thrust areas
- i) Share and assist in curriculum development
- j) Nominate faculty members of each institute to academic bodies of other institutes
- k) Make arrangement of stay in hostel for visiting faculty
- l) Provide help to develop mutual relations with other institutes, industry, non-government organization and local bodies to provide the service to community and economy.

For implementing and monitoring of Project University College of Engineering, Osmania University and RGIT, Nandyal also agree that:

- a) The networking between University College of Engineering, Osmania University and RGIT, Nandyal will be implemented by, created by creating a Networking Coordination Cell both at University College of Engineering, Osmania University and RGIT, Nandyal
- b) Each such cell will be headed by a faculty nominated by the Principals of the University College of Engineering, Osmania University and RGIT, Nandyal University who shall be designated as network coordinator and whose main responsibility will be to execute and coordinate all activities envisaged under this MoU.
- c) University College of Engineering, Osmania University and RGIT, Nandyal will constitute a Network Coordinator Committee (NCC) for regular monitoring of the activities and achieving the set targets. The committee will meet at least once in six months and review the progress.
- d) The composition of the committee shall be the following:

i. Principal & Secretary / Director, Univ. College of Engg., OU	Chairman
ii. Principal, RGIT, Nandyal	Member
iii. One Professor of Univ. College of Engg., OU	Member
iv. One Professor of RGIT, Nandyal	Member
v. Network Coordinator, Univ. College of Engg., OU	Member
vi. Network Coordinator, RGIT, Nandyal	Member
vii. One SPFU Officer nominated by SPFU Head	Member

- e) The Networking Coordinators from UCEO and RGIT, Nandyal will meet at least one in three months to assess the benefits of networking and re resolve any problems that are being faced. A networking progress report will be prepared by the Network Coordinators on a quarterly basis, which will be submitted to SPFU Head for onward transmission to NPIU.

Regarding the financial agreements during the project implementation; University College of Engineering, Osmania University and RGIT, Nandyal further agree to:

- a) Both the institutes will engage services of the existing faculty and staff for networking arrangement and no additional staff will be provided. Such staff will not be provided any honorarium
- b) Both the institutes will utilize existing infrastructure for networking arrangement and will create new facilities at the cost of TEQIP
- c) All expenses in connection with implementation and monitoring such as TA / DA, boarding / lodging and conveyance of students / faculty / researchers will be borne by TEQIP

4.0 Settlement of Disputes

In case of any dispute / differences of opinion or any such mater, decision of the Head of the SPFU will be final and binding on both the parties concerned.

5.0 Termination of MoU

If necessary, NCC will meet review the contents of the MoU and will expand the scope of the MoU as per requirement. The MoU can be terminated by mutual consent of the parties involved with permission form SPFU / NPIU.

Signature on behalf of
University College of Engineering, Osmania University, Hyderabad

Signed on behalf of
RGIT, Nandyal

In presence of
Project Director, SPFU
Andhra Pradesh State

**MEMORANDUM OF UNDERSTANDING
BETWEEN
UNIVERSITY COLLEGE OF ENGINEERING
OSMANIA UNIVERSITY, HYDERABAD
AND
GOVERNMENT INSTITUTE OF ELECTRONICS, SECUNDERABAD**

6.0 Background:

The Government of India (GoI) has decided to bring in systemic transformation of Technical Education in India. This is to be achieved through intensive drive for excellence in the engineering colleges and polytechnics to make the system demand driven, quality conscious and responsive to rapid economic and technological changes occurring both at national and international levels. The system has to be expanded not only to address the needs of organized sector but also to cover the needs of unorganized and rural sectors with its relevance to productivity.

The Technical Education Quality Improvement Project (TEQIP) undertaken by GoI proposes to stimulate emergence of already well performing institutions into lead centers for self-sustaining excellence over the project period and develop multilateral synergistic network with neighboring institutions.

The National Project Implementation Unit (NPIU), implementing agency for TEQIP, has selected University College of Engineering (UCE), Osmania University (OU), Hyderabad as lead institute and Govt. Institute of Electronics, Secunderabad as network institute for participation in the project.

7.0 Project Aim

To develop a formal network for bi-directional sharing of the expertise and resources to improve the performance of teaching-learning process to such a level that the institutes emerge as Centers of Excellence in Technical Education, Training and Research.

8.0 The Understanding

University College of Engineering, Osmania University, Hyderabad as lead institution, and Govt. Institute of Electronics, Secunderabad as network institute under TEQIP jointly through this Memorandum of Understanding (MoU) decide to undertake various activities as listed below (suggested):

- m) Maintain career, interest and competency profiles of faculty members
- n) Organize lectures of experts of UCEO institute for students of Govt. Institute of Electronics, Secunderabad
- o) Organizing workshop to non-teaching laboratory staff
- p) Make available library and learning resources to visiting faculty
- q) Develop and work on joint proposal of research and consultancy
- r) Organize jointly continuing education program for professionals
- s) Organize seminars, conferences and workshops on topics of general interest
- t) Organize training and lectures on emerging and thrust areas
- u) Share and assist in curriculum development
- v) Nominate faculty members of each institute to academic bodies of other institutes
- w) Make arrangement of stay in hostel for visiting faculty
- x) Provide help to develop mutual relations with other institutes, industry, non-government organization and local bodies to provide the service to community and economy.

For implementing and monitoring of Project University College of Engineering, Osmania University and Govt. Institute of Electronics, Secunderabad also agree that:

- f) The networking between University College of Engineering, Osmania University and Govt. Institute of Electronics, Secunderabad will be implemented by, created by creating a Networking Coordination Cell both at University College of Engineering, Osmania University and Govt. Institute of Electronics, Secunderabad.
- g) Each such cell will be headed by a faculty nominated by the Principals of the University College of Engineering, Osmania University and Govt. Institute of Electronics, Secunderabad University who shall be designated as network coordinator and whose main responsibility will be to execute and coordinate all activities envisaged under this MoU.
- h) University College of Engineering, Osmania University and Govt. Institute of Electronics, Secunderabad will constitute a Network Coordinator Committee (NCC) for regular monitoring of the activities and achieving the set targets. The committee will meet at least once in six months and review the progress.
- i) The composition of the committee shall be the following:

i. Principal & Secretary / Director, Univ. College of Engg., OU	Chairman
ii. Principal, Govt. Institute of Electronics, Secunderabad	Member
iii. One Professor of Univ. College of Engg., OU	Member
iv. One Professor of Govt. Institute of Electronics, Secunderabad	Member
v. Network Coordinator, Univ. College of Engg., OU	Member
vi. Network Coordinator, Govt. Institute of Electronics, Secunderabad	Member
vii. One SPFU Officer nominated by SPFU Head	Member

- j) The Networking Coordinators from UCEO and Govt. Institute of Electronics, Secunderabad will meet at least once in three months to assess the benefits of networking and resolve any problems that are being faced. A networking progress report will be prepared by the Network Coordinators on a quarterly basis, which will be submitted to SPFU Head for onward transmission to NPIU.

Regarding the financial agreements during the project implementation; University College of Engineering, Osmania University and Govt. Institute of Electronics, Secunderabad further agree to:

- d) Both the institutes will engage services of the existing faculty and staff for networking arrangement and no additional staff will be provided. Such staff will not be provided any honorarium
- e) Both the institutes will utilize existing infrastructure for networking arrangement and will create new facilities at the cost of TEQIP
- f) All expenses in connection with implementation and monitoring such as TA / DA, boarding / lodging and conveyance of students / faculty / researchers will be borne by TEQIP

9.0 Settlement of Disputes

In case of any dispute / differences of opinion or any such matter, decision of the Head of the SPFU will be final and binding on both the parties concerned.

10.0 Termination of MoU

If necessary, NCC will meet to review the contents of the MoU and will expand the scope of the MoU as per requirement. The MoU can be terminated by mutual consent of the parties involved with permission from SPFU / NPIU.

Signature on behalf of
University College of Engineering, Osmania University, Hyderabad

Signed on behalf of
Govt. Institute of Electronics, Secunderabad

In presence of
Project Director, SPFU
Andhra Pradesh State

Annex – IV

**Technical Education Quality Improvement Programme
Networking Among Programme Institutions
Networking Work Plan Format (2005-06)**

Name of Institution **University College of Engineering, Osmania University**

Name of Network partner 1 **Srinidhi Institute of Technology**

s. No	Major Networking activity out flowing from the institution	Steps	Starti ng date	Closi ng date	Cost invol ved (if any)	Expected benefits	Major Networking activity in flowing into the institution	Steps	Starti ng date	Closi ng date	Cost invol ved (if any)	Expected benefits
Support in R & D activities in the following areas												
1.	Microwave Navigational Electronics	1. Identifying the specific research problem	April 2005	June 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization, Team building, Identifying the research problems and Exploring for the possible solutions	1. Modeling meshing and analysis of mechanical structures	1. Method ology	Begin ning of May, 2005	End of May, 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization and Team building
		2. Carrying out investigations for the identified research problem	July 2005	March 2005				2. Applicati ons				
2.	VLSI & Digital Communicat ion	1. Identifying the specific research problem	April 2005	June 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization, Team building, Identifying the research problems and Exploring for the possible solutions	2. FACT Controllers	1. Method ology	Begin ning of May, 2005	End of May, 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization and Team building
		2. Carrying out investigations for the identified research problem	July 2005	March 2005				2. Applicati ons				
3.	CAM and Robotics	1. Identifying the specific research problem	April 2005	June 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization, Team building, Identifying the research problems and Exploring for the possible solutions	3. Cryptography & security	1. Method ology	Begin ning of May, 2005	End of May, 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization and Team building

		2. Carrying out investigations for the identified research problem	July 2005	March 2005				2. Applications				
4.	Object Oriented Analysis and Design	1. Identifying the specific research problem	April 2005	June 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization, Team building, Identifying the research problems and Exploring for the possible solutions	4. Joint Organization of seminar / conferences	1. Identification 2. Organization	Beginning of January, 2005	End of May, 2005	0.50	Faculty development, Knowledge enhancement, Expertise utilization and Team building
		2. Carrying out investigations for the identified research problem	July 2005	March 2005								
5.	Joint Organization of Seminar / Conferences	1. Identification 2. Organization	Beginning of Jan. 2005	End of May, 2005	0.50	Faculty development, Knowledge enhancement, Expertise utilization and Team building						

**Technical Education Quality Improvement Programme
Networking Among Programme Institutions
Networking Work Plan Format January – Juen (2005-06)**

Name of Institution **Sreenidhi Institute of Science and Technology**

Name of Network partner 3 **University College of Engineering, Osmania University**

Major Networking Activity out flowing from the institution to the Network partner No. 3.

S. No.	Major Networking activity out flowing from the institution to the Network partner No. 4	Steps	Staring date	Closing date	Cost involved (If any) (Rs. In lakshs)	Expected Benefits
1.	Modeling meshing and analysis of mechanical structures	1. Methodology 2. Applications	Beginning of May 2005	End of May 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization and Team building
2.	FACT Controllers	1. Methodology 2. Applications	Beginning of May 2005	End of May 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization and Team building
3.	Cryptography & Security	1. Methodology 2. Applications	Beginning of May 2005	End of May 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization and Team building
4.	Joint organization of seminar / conference	1. Identification 2. Organization	Beginning of January 2005	End of May 2005	0.50	Faculty development, Knowledge enhancement, Expertise utilization and Team building

Major Networking Activity out flowing from the institution to the Network partner No. 3.

S. No.	Major Networking activity in flowing from the institution to the Network partner No. 3	Steps	Starting date	Closing date	Cost involved (If any) (Rs. In lakhs)	Expected Benefits
Support in R & D activates in the following areas						
1.	Microwave Navigational Electronics	1. Identifying the specific research problem	April 2005	June 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization, Team building, Identifying the research problems and Exploring for the possible solutions
		2. Carrying out investigations for the identified research problem	July 2005	March 2005		
2.	VLSI & Digital Communication	1. Identifying the specific research problem	April 2005	June 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization, Team building, Identifying the research problems and Exploring for the possible solutions
		2. Carrying out investigations for the identified research problem	July 2005	March 2005		
3.	CAM and Robotics	1. Identifying the specific research problem	April 2005	June 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization, Team building, Identifying the research problems and Exploring for the possible solutions
		2. Carrying out investigations for the identified research problem	July 2005	March 2005		
4.	Object Oriented Analysis and Design	1. Identifying the specific research problem	April 2005	June 2005	0.10	Faculty development, Knowledge enhancement, Expertise utilization, Team building, Identifying the research problems and Exploring for the possible solutions
		2. Carrying out investigations for the identified research problem	July 2005	March 2005		
5.	Joint Organization of Seminar / Conferences	1. Identification 2. Organization	Beginning of Jan. 2005	End of May, 2005	0.50	Faculty development, Knowledge enhancement, Expertise utilization and Team building

**Technical Education Quality Improvement Programme
Networking Among Programme Institutions
Networking Work Plan Format (2005-06)**

Name of Institution **University College of Engineering, Osmania University**
Name of Network partner 3 **RGIT, Nandyal**

s. No	Major Networking activity out flowing from the institution	Steps	Starting date	Closing date	Cost involved (if any)	Expected benefits	Major Networking activity in flowing into the institution	Steps	Starting date	Closing date	Cost involved (if any)	Expected benefits
1.	1. Expertise in establishing the digital library	Purchase of equipment	Feb. 2005		0.20	Digital library will be established	1. Joint Seminar / National Conference on Digital Signal & Processing	1. Deciding the modality of workshop with other network partners	Mar. 2005		0.50	Our student and staff will get exposed to the latest technologies all the subject area and share the views of different people
		Finalizing the dates of visit	Feb. 2005					2. Identifying the Resources persons	Mar. 2005			
								3. Preparation of advertising material and giving advertisement	Apr. 2005			
								4. Organization of seminar	Jun. 2005			
	2. Expertise from placement cell	Finalizing the dates	Jan. 2005		0.05	Our students will get more information on placement areas from well established placement cell	2. Sharing of library facilities (National & International Journals)	1. Finalizing dates of visit	Feb. 2005		0.10	
		Conduct of lectures and expert advise to our student by the placement officer.	Feb. 2005					2. Identifying the staff	Feb. 2005			
				3. Visit to our library				Feb./ Mar. 2005				

**Technical Education Quality Improvement Programme
Networking Among Programme Institutions
Networking Work Plan Format (2005-06 upto June 2005)**

Name of Institution

Rajeev Gandhi Memorial College of Engineering & Technology, Nandyal

Name of Network partner 2

University College of Engineering, Osmania University

s. No	Major Networking activity out flowing into the institution	Steps	Starti ng date	Closi ng date	Cost invol ved (if any)	Expected benefits	Major Networking activity in flowing from the institution	Steps	Starting date	Closing date	Cost invol ved (if any)	Expected benefits
1.	1. Joint Seminar / National Conference on Digital Signal & Processing	1. Deciding the modality of workshop with other network partners	Mar. 2005		0.50	Our student and staff will get exposed to the latest technologies all the subject area and share the views of different people	1. Expertise in establishing the digital library	Purchase of equipment	Feb. 2005		0.20	Digital library will be established
		2. Identifying the Resources persons	Mar. 2005					Finalizing the dates of visit	Feb. 2005			
		3. Preparation of advertising material and giving advertisement	April 2005					Finalizing the dates	Jan. 2005	0.05	Our students will get more information on placement areas from well established placement cell	
		4. Organization of seminar	Jun. 2005					Conduct of lectures and expert advise to our student by the placement officer.	Feb. 2005			

**Technical Education Quality Improvement Programme
Networking Among Programme Institutions
Networking Work Plan Format (2005-06)**

Name of Institution University College of Engineering, Osmania University

Name of Network partner 3 Government Institute of Electronics, Secunderabad

s. No	Major Networking activity in flowing into the institution	Steps	Starti ng date	Closi ng date	Cost involve d (if any)	Expe cted benef its	Major Networking activity out flowing from the institution	Steps	Starti ng date	Closi ng date	Cost involved (if any)	Expected benefits
1.	Short term training programme in Microwave engineering	Cutting edge areas	Feb. 2005	May 2005	0.15	Staff training	Conduct of training programmes to the lab assistants and technical assistants	1. TV servicing	Feb. 2005		0.15	All lab assistants
							2. Cell phone repairing	Mar. 2005				
							3. Radio servicing	2005				
							4. Video shooting	Mar. 2005				
							5. Visit to our library	Feb. 2005				

**Technical Education Quality Improvement Programme
Networking Among Programme Institutions
Networking Work Plan Format (2005-06)**

Name of Institution **Government Institute of Electronics, Secunderabad**

Name of Network partner 2 **University College of Engineering, Osmania University**

s. No	Major Networking activity out flowing from the institution	Steps	Starti ng date	Closi ng date	Cost invol ved (if any)	Expected benefits	Major Networking activity in flowing into the institution	Steps	Starti ng date	Closi ng date	Cost invol ved (if any)	Expected benefits
1.	Conduct of training programmes to the lab assistants and technical assistants	1. TV servicing	Feb. 2005		0.15	All lab assistants	Short term training programme in Microwave engineering	Cutting edge areas	Feb. 2005	May 2005	0.15	Staff training
2. Cell phone repairing		Mar. 2005										
3. Radio servicing		2005										
4. Video shooting		Mar. 2005										
5. Visit to our library		Feb. 2005										

**Technical Education Quality Improvement Programme
Networking Among Programme Institutions
Networking Work Plan Format (2005-06)**

Name of Institution **University College of Engineering, Osmania University**

Name of Network partner 2 **University College of Technology, Osmania University**

s. No	Major Networking activity out flowing from the institution	Steps	Starti ng date	Closi ng date	Cost invol ved (if any)	Expected benefits	Major Networking activity in flowing into the institution	Steps	Starti ng date	Closi ng date	Cost invol ved (if any)	Expected benefits
1.	Training of our students	1. Workshop 2. Drawing 3. Mechanical Engg.	Jan. 2005	May 2005	0.04		Lending our teachers	1. Teaching mass transfer and heat transfer to B.E. bio-Medical Engg. Students	Jan. 2005	May 2005	0.04	

**Technical Education Quality Improvement Programme
Networking Among Programme Institutions
Networking Work Plan Format (2005-06)**

Name of Institution **University College of Technology, Osmania University**

Name of Network partner 2 **University College of Technology, Osmania University**

s. No	Major Networking activity in flowing into the institution	Steps	Starti ng date	Closi ng date	Cost invol ved (if any)	Expected benefits	Major Networking activity out flowing from the institution	Steps	Starti ng date	Closing date	Cost involve d (if any)	Expected benefits
1.	Lending our teachers	1. Teaching mass transfer and heat transfer to B.E. bio-Medical Engg. Students	Jan. 2005	May 2005	0.04		Training of our students	1. Workshop	Jan. 2005	May 2005	0.04	
								2. Drawing				
								3. Mechanical Engg.				

**Technical Education Quality Improvement Programme
Services to Community and Economy
Work Plan Format (2005-06)**

Name of Institution: **University College of Engineering, Osmania University**

S. No.	Activity to be undertaken	Steps involved in undertaking the activity	Expected No of beneficiaries from the community	Starting date	Finishing date	Cost involved (Rs. Million)	Expected cost recovery, if any
1.	Construction safety standards awareness	Organizing conference	30	May 05	June 05	0.010	0.010
	Building repairs & maintenance	One day workshop	30	22 Dec. 04	22 Dec 05	0.0100	0.0100
	English language classes	Training program	30	03 Dec. 05	23 Dec 05	0.045	0.045
	EDC-SIMAP course	Training program	30	10 June 05	20 July 05	0.090	0.090
	Training for technicians	Workshop- 3 day	30	6 Dec. 04	8 Dec. 04	0.030	0.030
2.			From unorganized sector				
	Creating awareness about Working conditions	Two day workshop	60	July 05	July 05	0.040	0.040
	Awareness of education	Two day workshop	60	July 05	July 05	0.040	0.040
	Entrepreneur Resource Planning	Three day workshop	60	Aug. 05	Aug. 05	0.200	0.200
3.			From organized sector				
	Industrial productivity	Two day workshop	60	July 05	July 05	0.040	0.040
	Enhancing skills	Two day workshop	60	July 05	July 05	0.040	0.040

**Technical Education Quality Improvement Programme
Tribal Development Plan
Work Plan Format (2005-06)**

Name of Institution: **University College of Engineering, Osmania University**

S. No.	Activity to be undertaken	Steps involved in undertaking the activity	Expected No of beneficiaries	Starting date	Finishing date	Cost involved (Million)
1.	English coaching classes	Communication skills	60	1 Feb. 05	20 Mar. 05	0.090
		English for career				
		Preparatory TOEFL, GRE courses				
		Audio- video lab experience				
		Yoga classes				
2.	Remedial classes for First year students	Engineering Mechanics	30	10 July 05	2 Aug. 05	0.020
		Engineering Graphics	30	10 July 05	2 Aug. 05	0.020
		Mathematics	30	10 July 05	2 Aug. 05	0.020
		Engineering Physics	30	10 July 05	2 Aug. 05	0.020
		Engineering Chemistry	30	10 July 05	2 Aug. 05	0.020
3.	EDC – SIMAP programs	Small industries management program	30	9 Nov. 04	10 Feb. 05	0.250
		Skill and Technical up-gradation program	30	10 June 05	15 July 05	0.100
		Leadership and personality development program	30	10 July 05	20 July 05	0.200
		Workshop on entrepreneurship	60	25 June 05	27 June 05	0.250

PROCUREMENT OF GOODS UPTO 31st MARCH 2005

Name of Institution & Address: University College of Engineering, Osmania University,
Hyderabad – 500 007

1. Direct Contracting up to US \$500

Sl. No.	Items	Amount	Target
1	Nil		

2. Direct Contracting for Proprietary Items up to US \$20,000 (Rs. 0.9 millions)

Sl.No	Items	Amount	Target
1	Nil		

3. National shopping upto US \$50,000 (Rs. 2.25 millions)

Sl.No	Items	Amount	Target
1	Printers (Color Laser Printers 1, Dot Matrix Printers 4, Desk Jet Printer 3, etc.)	0.025	March 31, 2005
2	Milling Machine	0.800	March 31, 2005
3	Balancing Machine	0.500	March 31, 2005
4	Digital Consolidation Test Equipment	0.500	March 31, 2005
5	Electroencephalography System (Eeg)	0.090	March 31, 2005
6	Electromyography System (Emg)	0.060	March 31, 2005
7	Uv/Vis Spectrophotometer	0.220	March 31, 2005
8	Flame Photometer	0.050	March 31, 2005
9	Gas Chromotography System	0.220	March 31, 2005
10	Blood Cell Counter	0.120	March 31, 2005
11	Auto Analyser	0.110	March 31, 2005
12	Mass Spectrophotometer	0.490	March 31, 2005
13	Pulse Oximeter With Finger/Ear Probe	0.050	March 31, 2005
14	Nerve Stimulator	0.060	March 31, 2005
15	DSP Hardware and Software	0.500	March 31, 2005
16	Digital Storage Oscilloscopes (100mhz)	0.400	March 31, 2005
17	Bedside Monitor	0.180	March 31, 2005
18	Precision Flow Sensor Calibration, Sources & Accessories	0.500	March 31, 2005

19	Precision Laser Sensor & Calibration Unit	0.100	March 31, 2005
20	Logic Analyzer	0.500	March 31, 2005
21	Educational Kits for Embedded System Design	0.025	March 31, 2005
22	Smart card development system	0.100	March 31, 2005
23	Copier	1.000	March 31, 2005
24	CAD Software Package, Pro E, Unigraphics NX	2.000	March 31, 2005
25	Atomic Absorption Spectrophotometer	1.000	March 31, 2005
26	X Ray diffracto Meter	2.000	March 31, 2005
27	Polarizing Microscope with a computer Camera & Printer	1.000	March 31, 2005
28	CNC EDM equipment	1.500	March 31, 2005
29	CNC Lathe	2.000	March 31, 2005
30	Gear Measuring Machine	1.000	March 31, 2005
31	Computer Centre	1.000	March 31, 2005
32	Instrumentation Centre	1.000	March 31, 2005
33	NASTRAN	1.000	March 31, 2005
34	PC Controlled Triaxial Testing System	1.000	March 31, 2005
35	Medi-Embedded systems with accessories	2.000	March 31, 2005
36	PLC Systems	0.250	March 31, 2005
37	Solid State AC/DC Drives	0.150	March 31, 2005
38	Power Analyzer	1.075	March 31, 2005
39	FPGA Design: VERILOG/VHDL Simulator, Synthesis & Place & Route, CPLD/ FPGA Programmer & Test Boards	0.200	March 31, 2005
40	Tanner Tools	0.100	March 31, 2005
41	Embedded System Software development Tools: Assembler, Compiler, simulator, Debugger, Emulator and RTOS	0.350	March 31, 2005
42	IBM Severs (with 4 CPUs, 4GB RAM, 2x80GB SCSI HDD)	0.500	March 31, 2005
43	Sun Solaris Servers (with 4 CPUs, 4GB RAM, 2x80GB SCSI HDD)	0.500	March 31, 2005
44	Development systems with Vx-works realtime OS, development tools	0.500	March 31, 2005
45	Press and Dies	1.000	March 31, 2005
46	Hot Forging m/c	1.000	March 31, 2005
47	Heat exchanger	1.000	March 31, 2005
48	Cylindrical grinding m/c	1.000	March 31, 2005
49	CMM Machine	1.000	March 31, 2005

4. National Competitive Bidding (NCB) US \$50,000 to US \$300,000

Sl.No.	Items	Amount	Target
1	Digital Library Indian & Foreign Journals Print / Electronic Version	3.300	March 31, 2005
2	CNC milling m/c	2.500	March 31, 2005
3	MATTA ASPHALT testing system	2.500	March 31, 2005
	TOTAL	40.025	

PROCUREMENT OF GOODS UPTO 30th JUNE 2005

Name of Institution & Address: University College of Engineering, Osmania University,
Hyderabad – 500 007

1. Direct Contracting up to US \$500

Sl. No.	Items	Amount	Target
1	Nil		

2. Direct Contracting for Proprietary Items up to US \$20,000 (Rs. 0.9 millions)

Sl.No.	Items	Amount	Target
1	Nil		

3. National shopping upto US \$50,000 (Rs. 2.25 millions)

Sl.No.	Items	Amount	Target
1	Hydrology Calculator (SCS Designer, MODFLOW, etc)	0.200	June 30, 2005
2	Mathematical Tool (MATLAB)	0.150	June 30, 2005
3	Programming Language (Diff Compilers Tool Kits)	0.100	June 30, 2005
4	Structural Analysis (STADD Pro – 2003, STAAP, GT Strudal)	0.550	June 30, 2005
5	Civil Works	0.400	June 30, 2005
6	Procurement of goods	0.400	June 30, 2005
7	DSP Controlled Drive Systems	0.600	June 30, 2005
8	Logic Analyzer	0.500	June 30, 2005
9	Educational Kits for Embedded System Design	0.500	June 30, 2005

4. National Competitive Bidding (NCB) US \$50,000 to US \$300,000

Sl.No.	Items	Amount	Target
1	Digital Library Indian & Foreign Journals Print / Electronic Version	3.300	June 30, 2005
2	CNC milling m/c	2.500	June 30, 2005
3	MATTA ASPHALT testing system	2.500	June 30, 2005
4	Computers, Servers and Related software	5.000	June 30, 2005
5	Campus wide Networking Fiber Optic of all Depts. in Engg. College	5.000	June 30, 2005
6	CAD LAB I	3.000	June 30, 2005
7	General Purpose Lathes	2.260	June 30, 2005
	TOTAL	26.960	