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JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA KAKINADA-533003, Andhra Pradesh (India)

(Established by Andhra Pradesh Act No. 30 of 2008)

Univ. Order No.JNTUK/ Academic Senate/2023

Date: 18-10-2023

Sub: JNTUK - Academic Senate - Starting of Open and Distance Learning (ODL) and

Online Programmes - Orders - Issued.

Read: Resolutions of the "XXXI" Academic Senate Meeting of JNTUK held on 17-10-

2023 under Table Item.

ORDER:

In pursuance of the resolutions of the "XXXI" Academic Senate Meeting of JNTUK, held on 17-10-2023 vide ref. read above, the Hon'ble Vice-Chancellor, JNTUK, is pleased to approve the starting of Open and Distance Learning (ODL) and Online Programmes, JNTUK, Viz. (i) MBA – (ODL) (ii) AI&ML (Online Programme), and also approve the Programme Project Reports (PPRs) for the following proposed programmes:

- 3. MBA Open and Distance Learning (ODL) 02 years
- 4. M.S in AI&ML Online Programme 02 years.

//ISSUED BY ORDER//

To

The Director, Centre for Distance and Online Education, JNTUK.

Copy to the Secretary to Hon'ble Vice-Chancellor, JNTUK.

Copy to the PA to Rector, JNTUK.

Copy to the PA to Registrar, JNTUK.

Copy to the OSD, JNTUK.

Copy to the JR, DR, AR, Supdts., JNTUK.

REGISTRAR

REGISTRAR J.N.J. University Kakinada Makinada-130003

ACADEMIC REGULATIONS

COURSE STRUCTURE

For

MASTER OF BUSINESS ADMINISTRATION

(Applicable for the batches admitted from 2023-24)



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA KAKINADA – 533003, ANDHRA PRADESH, INDIA

1. INFORMATION ON RELEVANCE OF PROGRAM:

INTRODUCTION:

JNTUK is offering M.B.A. program to equip the students with necessary conceptual and analytical skills required for handling the business operations.

Objectives of the program:

- 1) This program aims at developing the required knowledge, skills and aptitude among learners so that they contribute significantly in the area of trade, commerce and industry.
- 2) To impart qualitative and value based management & commerce education to the student's in terms of knowledge, skills and attitudes of social services to enable them to have all-round development.
- 3) Students will be able to understand and apply the accounting principles, concepts and applications in the changing Global environment by studying Accounting and management related concepts

2. PROGRAM DURATION: 2 years (Max. period is 4 years)

3. INSTRUCTIONAL DESIGN

Eligibility & Admission Criteria: Passed any Bachelor Degree of minimum 3 years duration. Obtained at least 50% marks (45% in case of Candidates belonging to reserved category) in the qualifying examination.

Medium and Method of instruction: The medium of instruction shall be English. The method of instruction shall comprise print and face to face interaction.

Course Material: Comprehensive printed course material, specially designed for self-study, shall be provided to every learner, Soft copy of the Self Learning Material (SLM) will be supplied to all the learners after confirmation of admission In addition to the course material, the learners are required to read suggested textbooks and articles published in journals.

Academic Counseling: Face-to-face classes or online classes are conducted at designated centres in all programs to enable the learners to have interaction with resource persons for clarification of doubts.

Examinations: Each paper carries 70 marks end theory examinations and 30 marks internal assessment in the form of assignments. Exams are conducted at different affiliated colleges of the University by sending observers from University

Duration: The duration of each theory examination shall be three hours.

4. PROCEDURE OF EVALUATION

The theory papers of end examinations will be evaluated by a different faculty members drawn from University and affiliated colleges.

Internal Evaluation: Internal evaluation shall be made on the evaluation of the assignments submitted by the learners for 30 marks.

Reappearance: A learner who has fails in any theory paper of any year shall have to reappear for the examination of that course in the following end examinations.

Betterment:

- 1. Learners who have passed in all the courses of a program and who have obtained a Pass or Second Class are eligible for attempting for Betterment of Grades.
- 2. Learners who have already secured a First Class are not eligible for betterment of Grade.
- 3. Betterment of Grades is permitted only once and that too within two years of passing.
- 4. Learners can appear for betterment of all papers in a year.
- 5. New Marks list / Provisional Certificate shall be issued to candidates who have improved their Class after submitting the old Marks List/Provisional Certificate only.

5. Eligibility for the Award of Master of Business Administration (M.B.A.) Degree:

Duration of the program: The course of study for M.B.A. Program through Open & Online Distance Learning shall be extended over a period of two academic years. However, a learner may complete the program in not more than four years including the study period.

A learner shall be eligible for the award of M.B.A., if he/she fulfils the following conditions.

- 1. Registered and successfully completed all the courses.
- 2. Successfully acquired the minimum required marks as specified in the curriculum.
- 3. The learners should not have any dues to the University, and
- 4. No disciplinary action is pending against the learner.

6. GENERAL INSTRUCTIONS:

The academic regulations should be read as a whole for purpose of any interpretation.

- In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Vice Chancellor is final.
- The University may change or amend the academic regulations, scheme of instructions and syllabus at any time and the changes and amendments made shall be applicable to all the learners with effect from a date notified by the University.
- 7. FEE STRUCTURE: Rs. 15,000/- (tuition fee) per Semester

COURSE STRUCTURE

| S.No | Course Code | Courses | Marks | L | T | P | С |
|------|---------------------------|--|-------|----|---|---|----|
| 1 | C-101 | Management and Organizational Behavior | 100 | 4 | 0 | 0 | 4 |
| 2 | C-102 | Managerial Economics | 100 | 4 | 0 | 0 | 4 |
| 3 | C-103 | Accounting for Managers | 100 | 4 | 0 | 0 | 4 |
| 4 | C-104 | Quantitative Analysis for Business Decisions | 100 | 4 | 0 | 0 | 4 |
| 5 | C-105 | Legal and Business Environment | 100 | 4 | 0 | 0 | 4 |
| 6 | C-106 | Business Communication and Soft skills | 100 | 4 | 0 | 0 | 4 |
| 7 | C-107 Open Elective | Cross Cultural Management Rural Innovation projects MOOCs: SWAYAM/NPTEL- Related to Management Courses other than listed courses in the syllabus | 100 | 4 | 0 | 0 | 4 |
| 8 | C-108 | Business Communication and Soft skills Lab | 50 | 0 | 0 | 2 | 2 |
| 9 | C-109 | Information Technology – Lab1(Spreadsheet and Tally) | 50 | 0 | 0 | 2 | 2 |
| | | Total | 800 | 28 | 0 | 4 | 32 |

| | | I YEAR II SEMESTER | | | | | |
|------|---------------------------|---|-------|----|---|---|----|
| S.No | Course Code | Courses | Marks | L | Т | P | С |
| 1 | C-201 | Financial Management | 100 | 4 | 0 | 0 | 4 |
| 2 | C-202 | Human Resource Management | 100 | 4 | 0 | 0 | 4 |
| 3 | C-203 | Marketing Management | 100 | 4 | 0 | 0 | 4 |
| 4 | C-204 | Operations Management | 100 | 4 | 0 | 0 | 4 |
| 5 | C-205 | Business Research Methods | 100 | 4 | 0 | 0 | 4 |
| 6 | C-206 open elective | Project Management Technology Management Lean Management Database Management System | 100 | 4 | 0 | 0 | 4 |
| 7 | C-207 | IT-lab 2(Programming R) | 50 | 0 | 0 | 2 | 2 |
| Tota | 1 | 1 | 650 | 24 | 0 | 2 | 26 |

| S.No | Course | Courses | Marks | L | Т | P | С |
|------|--------|---|-----------|----|---|---|----|
| | Code | | | | | | |
| 1 | C-301 | Strategic Management | 100 | 4 | 0 | 0 | 4 |
| 2 | C -302 | Operations Research | 100 | 4 | 0 | 0 | 4 |
| 3 | E -301 | Elective – 1 | 100 | 4 | 0 | 0 | 3 |
| 4 | E-302 | Elective – 2 | 100 | 4 | 0 | 0 | 3 |
| 5 | E-303 | Elective – 3 | 100 | 4 | 0 | 0 | 3 |
| 6 | E-304 | Elective – 4 | 100 | 4 | 0 | 0 | 3 |
| 7 | C-304 | Industrial Project based on Summer Internship | 100 | 4 | 0 | 0 | 4 |
| | | | Total 700 | 28 | 0 | 0 | 24 |

| | II YEAR IV SEMESTER | | | | | | | | | |
|------|---------------------|---------------------------------------|-------|----|---|---|-----|--|--|--|
| S.No | Course Code | Courses | Marks | L | Т | P | C | | | |
| 1 | C -401 | Supply Chain Management and Analytics | 100 | 4 | 0 | 0 | 4 | | | |
| 2 | C-402 | Innovation and Entrepreneurship | 100 | 4 | 0 | 0 | 4 | | | |
| 3 | E-401 | Elective – 5 | 100 | 4 | 0 | 0 | 3 | | | |
| 4 | E-402 | Elective – 6 | 100 | 4 | 0 | 0 | 3 | | | |
| 5 | E-403 | Elective – 7 | 100 | 4 | 0 | 0 | 3 | | | |
| 6 | E-404 | Elective – 8 | 100 | 4 | 0 | 0 | 3 | | | |
| 7 | C-403 | Comprehensive Viva- voce | 50 | 0 | 0 | 0 | 2 | | | |
| | | Total Marks / Credits | 650 | 28 | 0 | 0 | 22 | | | |
| | | | 2800 | | | | 104 | | | |

HUMAN RESOURCE MANAGEMENT

III SEMESTER

| S. no | Course | SUBJECT TITLE |
|-------|--------|---|
| | Code | |
| 1 | EH-301 | Leadership and Change Management |
| 2 | EH-302 | Performance Evaluation and Compensation |
| | | Management |
| 3 | EH-303 | Human Resource Metrics and Analytics |
| 4 | EH-304 | Human Capital Management |
| 5 | EH-305 | Manpower Planning, Recruitment, and Selection |

IV SEMESTER

| S. no | Course | SUBJECT TITLE |
|-------|--------|-----------------------------------|
| | Code | |
| 1 | EH-401 | Labor Welfare and employment laws |
| 2 | EH-402 | International HRM |
| 3 | EH-403 | Employee Relations and Engagement |
| 4 | EH-404 | Human Resources Development |
| 5 | EH-405 | Strategic HRM |

FINANCE

III SEMESTER

| | | III GENIEG I EIX |
|-------|--------|---|
| S. no | Course | SUBJECT TITLE |
| | Code | |
| 1 | EF-301 | Investment Analysis and Portfolio Management |
| 2 | EF-302 | Managing Banks and Financial Institutions |
| 3 | EF-303 | Financial Markets and Services |
| 4 | EF-304 | Mergers, Acquisitions and Corporate Restructuring |
| 5 | EF-305 | Taxation |

IV SEMESTER

| S. no | Course | SUBJECT TITLE |
|-------|--------|--------------------------------|
| | Code | |
| 1 | EF-401 | Financial Derivatives |
| 2 | EF-402 | Global Financial Management |
| 3 | EF-403 | Financial Risk Management |
| 4 | EF-404 | Strategic Financial Management |
| 5 | EF-405 | Behavioral Finance |



ACADEMIC REGULATIONS

COURSE STRUCTURE

For M.S in

ARTIFICIAL INTELEGENCE & MACHINE LEARNING

(Applicable for the batches admitted from 2023-24)



JAWAHARLAL NEHRU TECHNOLOGICAL UNIVERSITY KAKINADA KAKINADA–533003,ANDHRA PRADESH,INDIA



1. INFORMATION ON RELEVANCE OF PROGRAM:

INTRODUCTION:

JNTUK is offering M.S in AIML course to equip the students with necessary conceptual and analytical skills required for creating artificial intelligent applications.

Objectives of the program:

- Study the concepts of Artificial Intelligence.
- Learn the methods of solving problems using Artificial Intelligence.
- Learn the knowledge representation techniques, reasoning techniques and planning
- Introduce the concepts of Expert Systems and machine learning.

2. PROGRAM DURATION: 2 year (Max. period is 4 years)

3. INSTRUCTIONAL DESIGN

Eligibility & Admission Criteria: Passed any Bachelor Degree of minimum 3 years duration with Science, Mathematics or Engineering background. Obtained at least 50% marks (45% in case of Candidates belonging to reserved category) in the qualifying examination.

Medium and Method of instruction: The medium of instruction shall be English. The method of instruction shall comprise print and face to face interaction.

Course Material: Comprehensive printed course material, specially designed for self-study, shall be provided to every learner, Soft copy of the Self Learning Material (SLM) will be supplied to all the learners after confirmation of admission In addition to the course material the learners are required to read suggested text books and articles published in journals.

Academic Counseling: Face-to-face classes or online classes are conducted at designated centres in all programs to enable the learners to have interaction with resource persons for clarification of doubts.

Examinations: Each paper carries 70 marks end theory examinations and 30 marks internal assessment in the form of assignments. Exams are conducted at different affiliated colleges of the University by sending observers from University

Duration: The duration of each theory examination shall be three hours.

4. PROCEDURE OF EVALUATION

The theory papers of end examinations will be evaluated by a different faculty members drawn from University and affiliated colleges.

Internal Evaluation: Internal evaluation shall be made on the evaluation of the assignments submitted by the learners for 30 marks.

Reappearance: A learner who has fails in any theory paper of any year shall have to reappear for the examination of that course in the following end examinations.

Betterment:

- 1. Learners who have passed in all the courses of a program and who have obtained a Pass or Second Class are eligible for attempting for Betterment of Grades.
- 2. Learners who have already secured a First Class are not eligible for betterment of Grade.
- 3. Betterment of Grades is permitted only once and that too within two years of passing.
- 4. Learners can appear for betterment of all papers in a year.
- 5. New Marks list / Provisional Certificate shall be issued to candidates who have improved their Class after submitting the old Marks List/Provisional Certificate only.



5. Eligibility for the Award M.S in AIML Certification:

Duration of the program: The certification course of study for M.S in AIML through Online Learning shall be extended over a period of Two (2) academic years. However, a learner may complete the program in not more than Four (4) years including the study period.

A learner shall be eligible for the award of M.S in AIML, if he/she fulfils the following conditions.

- 1. Registered and successfully completed all the courses.
- 2. Successfully acquired the minimum required marks as specified in the curriculum.
- 3. The learners should not have any dues to the University, and
- 4. No disciplinary action is pending against the learner.

6. GENERAL INSTRUCTIONS:

The academic regulations should be read as a whole for purpose of any interpretation.

- In case of any doubt or ambiguity in the interpretation of the above rules, the decision of the Vice Chancellor is final.
- The University may change or amend the academic regulations, scheme of instructions and syllabus at any time and the changes and amendments made shall be applicable to all the learners with effect from a date notified by the University.
- **7. FEE STRUCTURE:**Rs. 15,000/- (tuition fee) per Semester



COURSE STRUCTURE

I-SEMESTER

| | Course Code | Courses | Cate gory | L | Т | P | С |
|-------|-------------|-------------------------------------|-----------|---|---|---|----|
| 5.110 | Course code | Courses | Cute goly | | • | • | Č |
| 1 | MTAIML1101 | Program Core-1 | PC | 3 | 0 | 0 | 3 |
| | | Mathematics for ML | | | | | |
| 2 | MTAIML1102 | Program Core-2 | PC | 3 | 0 | 0 | 3 |
| | | Artificial Intelligence | | | | | |
| | | Program Elective-1 | | | | | |
| 3 | MTAIML1103 | 1. Data Mining | PE | 3 | 0 | 0 | 3 |
| | | 2. Big Data Analytics | | | | | |
| | | 3. High Performance Computing | | | | | |
| | | Program Elective-2 | | | | | |
| 4 | MTAIML1104 | 1. Cloud Computing | PE | 3 | 0 | 0 | 3 |
| | | 2. Internet of Things | | | | | |
| | | 3. Android Application Development | | | | | |
| 5 | MTAIML1105 | Research Methodology and IPR | CC | 2 | 0 | 0 | 2 |
| 6 | MTAIML1106 | Laboratory-1 | LB | 0 | 0 | 4 | 2 |
| | | Python Programming Lab | | | | | |
| 7 | MTAIML1107 | Laboartory-2 | LB | 0 | 0 | 4 | 2 |
| | | Android Application Development and | | | | | |
| | | Cloud Computing Lab | | | | | |
| 8 | MTAIML1108 | Audit Course-1* | AC | 2 | 0 | 0 | 0 |
| | | Total Credits | | | | | 18 |

^{*}Student has to choose any one audit course listed below.

II SEMESTER

| S.No | Course | Courses | Category | L | T | P | C |
|------|------------|-------------------------------------|----------|---|---|---|----|
| | Code | | | | | | |
| 1 | MTAIML1201 | Program Core-3 | PC | 3 | 0 | 0 | 3 |
| | | Machine learning | | | | | |
| 2 | MTAIML1202 | Program Core-4 | PC | 3 | 0 | 0 | 3 |
| | | Deep Learning | | | | | |
| | | Program Elective-3 | | | | | |
| 3 | MTAIML1203 | 1. Computer Vision | PE | 3 | 0 | 0 | 3 |
| | | 2. Natural Language Processing | | | | | |
| | | 3. Recommender Systems | | | | | |
| | | Program Elective-4 | | | | | |
| 4 | MTAIML1204 | 1. Robotics and Intelligent Systems | PE | 3 | 0 | 0 | 3 |
| | | 2. Reinforcement Learning | | | | | |
| | | 3. NoSQL Databases | | | | | |
| 5 | MTAIML1205 | Laboratory-3 | LB | 0 | 0 | 4 | 2 |
| | | Machine Learning Lab | | | | | |
| 6 | MTAIML1206 | Laboartory-4 | LB | 0 | 0 | 4 | 2 |
| | | Deep Learning Lab | | | | | |
| 7 | MTAIML1207 | Mini Project with Seminar | MP | 2 | 0 | 0 | 2 |
| 8 | MTAIML1208 | Audit Course-2 * | AC | 2 | 0 | 0 | 0 |
| | | Total Credits | | | | | 18 |

^{*}Student has to choose any one audit course listed below.



Audit Course 1 & 2:

- 1. English for Research Paper Writing
- 2. Disaster Management3. Sanskrit for Technical Knowledge
- 4. Value Education

- 5. Constitution of India
- 6. Pedagogy Studies
- 7. Stress Management by Yoga8. Personality Development through Life Enlightenment Skills



III-SEMESTER

| S.No | Course Code | Courses | Cate gory | L | T | P | С |
|------|----------------|---|--------------|---|---|----|----|
| 1 | MTAIML2101 | Program Elective-5 1. Advanced Data Structures and Algorithms 2. MOOCs-1 (NPTEL/SWAYAM) 12 Week Program related to the programme which is not listed in the course structure | PE | 3 | 0 | 0 | 3 |
| 2 | MTAIML2102 | Open Elective 1. MOOCs-2 (NPTEL/SWAYAM)-Any 12 Week Course on Engineering/ Management/ Mathematics offered by other than parent department 2. Course offered by other department sin the college | OE | 3 | 0 | 0 | 3 |
| 3 | MTAIML2103 | Dissertation-I/ Industrial Project # | PJ | 0 | 0 | 20 | 10 |
| | 7 | Total Credits | | | | | 16 |

#Students going for Industrial Project/Thesis will complete these courses through MOOCs

IV-SEMESTER

| | | M. Tech. (AI & ML) IV SEMESTER | | | | | |
|------|----------------|--------------------------------|--------------|---|---|----|----|
| S.No | Course Code | Courses | Cate gory | L | Т | P | C |
| 1 | MTAIML2201 | Dissertation-II | PJ | 0 | 0 | 32 | 16 |
| | To | otal Credits | | | | | 16 |

Open Elective Subjects

- 1. OPTIMIZATION TECHNIQUES
- 2. MODELING AND SIMULATION TECHNIQUES
- 3. BIOINFORMATICS
- 4. OPERATIONS RESEARCH