

Khandesh College Education Society's

Moolji Jaitha College, Jalgaon

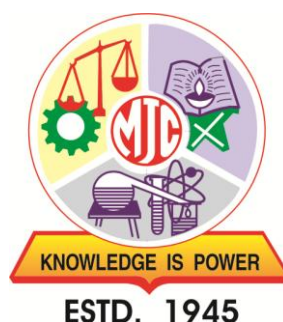
**An "Autonomous College" Affiliated to KBC North
Maharashtra University, Jalgaon**

SYLLABUS OF

M.A. II

Semester III & IV

DEFENCE AND STRATEGIC STUDIES



**UNDER CHOICE BASED CREDIT SYSTEM
(CBCS)**

[w. e. f. Academic Year 2020-21]

**CBCS Autonomous Structure for MA – 2nd Year
(Defence & Strategic Studies)**

Semester	Core Course	Paper No	Name of Course	No. of Credits	No. of Hours per Week
III	DSC	DEF 301	International Security	4	4
		DEF 302	Environment Security	4	4
		DEF 303	Arms Control and Disarmaments	4	4
	SEC	DEF 304	Conflict Resolution Management	4	4
	DSE	DEF 305	Research Methodology	4	4
IV	DSC	DEF 401	International Law	4	4
		DEF 402	Human Security	4	4
		DEF 403	Role of Science and Technology in National Security	4	4
	GE	DEF 404	India's Energy Security	4	4
	DSE	DEF 405	Dissertation : (Project Writing)	4	4
Total Credits				40	40

Syllabus Pattern for The all Courses (60: 40)

Nature	Marks
External Marks	60
Internal Marks	40
Total Marks	100

DSC DEF 301 International Security
(With Effect from June 2020)
(Credit 4)

Course Objectives:

- 1) Understand the meaning, nature and scope of international security.
- 2) Analyze the purpose and functions of international security.
- 3) Identify the various legal aspects pertaining to security including war.

Learning Outcomes:

At the end of the course, the student will be able to:

- 1) Students acknowledge about international conflicts.
- 2) Students can find out the solutions over international tensions.
- 3) Students can join international security services in international security.

Unit	Topic	Sub-topic	Lectures
1	Introduction and Approaches	a) Conceptual understanding of international security: b) Security – meaning nature and scope; international security – meaning, nature and scope, types of international issues c) Idealism e) Realism e) Rationalism f) Constructivism Transaction Methodology : Classroom Teaching	15
2	International Organizations and Conflicts	a) United Nations Security Council - Membership, Legal Issues, b) Security membership and representation, legal personality, dispute settlement United Nations – principal organs, general assembly, c) Security council, charter amendment, use of force Diplomatic immunity d) Internal and international armed conflicts – some examples – war in land, sea and air Prisoners of war e) Interpol - Organised crime, ethnic conflicts Transaction Methodology : Classroom Teaching	15
3	Terrorism and International Security	a) Terrorism : Impact, preparation and response b) An Approach to the Economic and Financial Dimensions of Radicalization and Terrorism c) Counter-Terrorism: Correlating Security and Freedom d) Radicalism, Religious Extremism e) The Islamic State's Political Organization. The Political Impact of Jihadist Terrorisms f) Islamic State - Disputed Statehood Transaction Methodology : Classroom Teaching	15
4	Asia-Pacific vision and	a) Asia - Pacific regional importance, geo-economic, geo-political issues	15

disputes	b) Security challenges in Asia Pacific region c) Major powers - USA, Russia and China d) Regional Super Power interest and Conflicts e) Emerging Trends in Geo-politics of Asia Pacific Region f) Development, Peace and Security Transaction Methodology : Classroom Teaching	
----------	--	--

Suggested Readings:

- 1) Peter Hough, Andrew Moran, Bruce Pilbeam, Wendy Stokes International Security Studies: Theory and Practice
- 2) R. J. Burke, Cary L. Cooper, International Terrorism and Threats to Security: Managerial and Organizational Challenges Edward Elgar Publishing, 01-Jan-2008
- 3) Anna Sroka, Fanny Castro-Rial Garrone, Rubén Darío Torres Kumbrián Peter Lang, Radicalism and Terrorism in the 21st Century: Implications for Security, Electronic books - 2017.
- 4) Anna G Tevini, Regional Economic Integration and Dispute Settlement in East Asia: The Evolving Legal Framework, Bloomsbury Publishing, 28-Jun-2018 (e Book available)
- 5) David W Lovell, Asia-Pacific Security: Policy Challenges, Institute of Southeast Asian Studies, 2003

DSC (DEF 302) Environment Security
(With Effect from June 2020)
(Credit 4)

Course Objectives:

- 1) Understand the importance of global environment safety
- 2) Analyze the causes and effects of global warming.
- 3) Identify the hazardous activities and challenges.

Learning Outcomes:

At the end of the course, the student will be able to:

- 1) Student knows the values of environment safety.
- 2) Student can perform our role as a safety officer.
- 3) To guide the Indian industrial and private sector about the environment protocol.
- 4) To suggest ideas to control imbalance nature cycle.

Unit	Topic	Sub-topic	Lectures
1	Approaches and Issues	a) Concept, scope, importance b) Pollution - types and effects c) Ecological management d) Issues - Deforestation, Pollution, Water Scarcity & Water Pollution, Loss of Biodiversity, Overpopulation, Waste Disposal, Land Management & Urban Sprawl, Public Health, e) Hazardous substances Transaction Methodology : Classroom Teaching, Documentary	15

2	Environments Agreements	<p>a) United Nations Environment Assembly - Role</p> <p>b) Nuclear safety treaties -</p> <ul style="list-style-type: none"> - Comprehensive Test Ban Treaty 1996 - Convention on Assistance in the Case of a Nuclear Accident or Radiological Emergency (Assistance Convention), Vienna, 1986 - Convention on Early Notification of a Nuclear Accident (Notification Convention), Vienna, 1986 - Convention on Nuclear Safety, Vienna, 1994 - Treaty Banning Nuclear Weapon Tests in the Atmosphere, in Outer Space, and Under Water <p>Vienna Convention on Civil Liability for Nuclear Damage, Vienna, 1963.</p> <p>c) Kyoto Protocol - 1997 - importance</p> <p>Transaction Methodology : Classroom Teaching, Documentary,</p>	15
3	Environmental cooperation and solutions	<p>a) Economics and environment</p> <p>b) Renewable energy - agreements</p> <p>c) North-South Dialogue on Carbon emission</p> <p>d) Trends in environment cooperation</p> <p>e) Climate diplomacy</p> <p>Transaction Methodology : Classroom Teaching, Industry visit</p>	15
4	India' Environment Doctrine	<p>a) Environment Challenges in India</p> <p>b) Forest and Climate Change - Carbon</p> <p>c) Water Policy</p> <p>d) Maritime Environment Safety policies and agreement</p> <p>e) Rio to Paris: India in global climate politics</p> <p>Transaction Methodology : Classroom Teaching, Documentary</p>	15

Suggested Readings:

- 1) Peter H. Sand, The Effectiveness of International Environmental Agreements: A Survey of Existing Legal Instruments, Cambridge University Press, 1992 (**Online E Books Availbale**)
- 2) Amitrajeet A Batabyal, The Economics of International Environmental Agreements, Routledge, 04- Dec-2017.
- 3) Sebastian Oberthür, Hermann E. Ott, The Kyoto Protocol: International Climate Policy for the 21st Century, Springer Science & Business Media, 20-Oct-1999.
- 4) Rajiv Nayan, The Nuclear Non-Proliferation Treaty and India, Routledge, 13-Sep-2013.
- 5) Mary E. Pettenger, The Social Construction of Climate Change: Power, Knowledge, Norms, Discourses, Ashgate Publishing, Ltd., 28-Mar-2013.
- 6) Ronald B Mitchell, International Politics and the Environment, SAGE Publications Ltd, 13-Nov-2009.
- 7) Vice Admiral Pradeep Kaushiva, Commander Abhijit Singh, Indian Ocean Challenges: A Quest for Cooperative Solutions: A Quest for Cooperative Solutions, KW Publishers Pvt Ltd, 15-Feb-2013.
- 8) C. M. Abraham, Environmental Jurisprudence in India, Martinus Nijhoff Publishers, 15-Sep-1999.
- 9) Prakash Chand Kandpal, Environmental Governance in India: Issues and Challenges, SAGE Publications, 17-Jan-2019.
- 10) Giacomo Cao, Roberto Orrù, Current Environmental Issues and Challenges, Springer Science & Business, 29-Apr-2014.

- 11) Dr Vijay Sakhuja, Dr Kapil Narula, Maritime Safety and Security in the Indian Ocean, Vij Books India Pvt Ltd, 01-Sep-2016.
- 12) William Sweet, Climate Diplomacy from Rio to Paris: The Effort to Contain Global Warming, Yale University Press, 06-Dec-2016.

DSC (DEF 303) Arms Control and Disarmaments
(With Effect from June 2020)
(Credit 4)

Course Objectives:

- 1) Acknowledge about world's arms race and market.
- 2) Understanding the peace and conflict in world affairs.

Learning Outcomes:

At the end of the course, the student will be able to:

- 1) Students can suggest the methods of disarmaments and arms controlling pacts.
- 2) Students can suggest path between India and other nations to control arms smuggling.
- 3) Students can do analysis the data and identified the nexus of illegal arms suppliers.

Unit	Topic	Sub-Topic	Lectures
1	Introduction and Approaches	a) Arms race in WW II - importance of arms power, b) Arms race in cold war c) Arms and economic development approaches d) Weapon of Mass Destruction e) Geneva Protocol 1925 Transaction Methodology : Classroom Teaching	15
2	Arms Conventions	a) The Chemical Weapons Convention (CWC) b) The Biological and Toxin Weapons Convention (BTWC) c) The Global Health Security Agenda (GHSA), d) The Convention on Cluster Munitions e) International Convention for the Suppression of Acts of Nuclear Terrorism Transaction Methodology : Classroom Teaching, Documentary	15
3	Arms Treaties and disarmaments	a) Arms Trade Treaty (ATT) b) Nuclear non-proliferation treaty (NPT) c) Comprehensive Test Ban Treaty d) Treaty on the limitation of Antibalistic Missiles (ABM) e) Strategic Arms Reduction Treaties (START I and II) f) Treaty on Certain Conventional Weapons (CCW) g) Chemical Weapons Convention (CWC) Transaction Methodology : Classroom Teaching, Documentary	15

4	India's Role in Arms Control and Disarmaments	a) Nehru's nuclear vision b) Nuclear ideology in Indian public c) Partial Test Ban Treaty (PTBT) d) Nuclear Deterrence e) NPT and India's nuclear vision for development and peace Transaction Methodology : Classroom Teaching, Documentary	15
---	---	--	----

Suggested Readings:

- 1) Paolo Foradori, Giampiero Giacomello, Alessandro Pascolini, Arms Control and Disarmament: 50 Years of Experience in Nuclear Education, Springer, 26-Oct-2017.
- 2) <http://disarmament.un.org/treaties/>
- 3) <https://www.armscontrol.org/treaties>
- 4) Michael Crowley, Malcolm Dando, Lijun Shang, Preventing Chemical Weapons: Arms Control and Disarmament as the Sciences Converge, Royal Society of Chemistry, 20-Aug-2018.
- 5) Oliver Meier, Christopher Daase, Arms Control in the 21st Century: Between Coercion and operation Routledge, 02-May-2013 - Political Science.

SEC (DEF-304) Conflict Resolution Management (With Effect from June 2020) (Credit 4)

Course Objectives:

- 1) To understand the basic causes of conflicts between nations.
- 2) To analyze the conflicts as a future lesson.

Learning Outcomes:

At the end of the course, the student will be able to:

- 1) Students learn the method of resolution management
- 2) Students can find out the solutions on conflict or buffer zone.

Unit	Topic	Sub-Topic	Lectures
I	Introduction and approaches	a) Introduction, meaning and scope, concept b) Conflict resolutions methods - Cooperative, Negotiation, Human Need Model, Transformation, c) Causes of conflicts d) Effects of Conflicts Transaction Methodology : Classroom Teaching	15

II	International Organization & Conflict Resolution / Conflict Resolution - South Asia	a) Role of United Nations in Conflict Resolution b) Conflict Prevention, Peacemaking, Peace keeping, Peace building c) Role of Multinational Organization in Peace building (ASIAN, SAARC, NATO, ECOWAS, AU) d) Human Rights and Humanitarian Intervention Transaction Methodology : Classroom Teaching	15
III	Anatomy of Internal Conflicts in India	1) Colonial Legacy, Communalism, Secularism and Religious Tolerance 2) Ethnic, Communal, and Caste Violence 3) Self Determination 4) Building Peace Through Multiculturalism: The Indian Experience 5) Refugee, Hunger, Famine and Migration as a Source of conflicts. Transaction Methodology : Classroom Teaching	15
IV	Contemporary International Conflicts	1) Rwanda 2) Afghanistan 3) Kosovo 4) Palestine 5) Kashmir 6) Syria Transaction Methodology : Classroom Teaching	15

Suggested Readings:

- 1) Bose, Sumantra. 2005. Kashmir: Roots of Conflict, Paths to Peace. Cambridge, MA: Harvard University Press.
- 2) Bush, Kenneth D. 2003. The Intra-group Dimensions of Ethnic Conflict in Sri Lanka: Learning to Read Between the Lines. Basingstoke: Palgrave Macmillan.
- 3) Field, M.M. Merry and R.C. Remy, eds. 1995. Teaching About International Conflict and Peace. New York: State University of New York Press.
- 4) Annan, Kofi. 2002. Strengthening of the United Nations: An Agenda for Further Change. Report of the Secretary General. UN Doc. A/57/387, September 9
- 5) Boudreau, Thomas. 1991. Sheathing the Sword: The U.N. Secretary General and the Prevention of International Conflict. New York: Greenwood Press
- 6) Boutros-Ghali. 1992. An Agenda for Peace. New York: United Nations
- 7) Brahimi, Lakhdar. 2000. Report of the Panel on United Nations Peace Operations. Brahimi Report. UN Doc. A/55/305, August 21
- 8) Evans, Gareth. 1993. Cooperating for Peace: The Global Agenda for the '90s and Beyond. New York, Allen and Unwin Publishers.
- 9) Bailey, Rayna. 2010. Immigration and Migration. New Delhi: Viva Books.
- 10) Bhargava, Rajeev, ed. Multiculturalism, Liberalism, and Democracy. New Delhi: Oxford University Press.
- 11) Bhargava, Rajeev, ed. 2005. Secularism and Its Critics. New Delhi: Oxford University Press.
- 12) Bookman, Milica Z. 2008. Tourists, Migration & Refugees, Chapter 4 and 5. New Delhi: Viva Books.

- 13) Hassan, Zoya, et al. eds. 2000. Transforming India: Social and Political Dynamics of Democracy. New Delhi: Oxford University Press.
- 14) Held, David, et al. 1999. Global Transformations: Politics, Economics and Culture. Stanford: Stanford University Press.
- 15) Jayaram, N, et al. 1996. Social Conflict. New Delhi: Oxford University Press.

DSE (DEF-305) Research Methodology
(With Effect from June 2020)
(Credit 4)

Course Objectives:

- 1) The paper deals with various basic elements of research problems, applications and types including research designs.
- 2) Understand the research ethnics in social sciences.

Learning Outcomes:

At the end of the course, the student will be able to:

- 1) Students can make good research paper and projects.
- 2) Students can do survey and observations.

Unit	Topic	Sub-Topic	Lectures
I	Scientific Method and Research	1) Introduction 2) Meaning & definition 3) Characteristics 4) Objective 5) Types of scientific research Transaction Methodology : Classroom teaching	15
II	Education Research	1) Introduction 2) Meaning and definition 3) Characteristics 4) Nature 5) Objective 6) Types of education research Transaction Methodology : Classroom teaching	15
III	Social Survey	1) Introduction 2) Meaning & definition 3) Characteristics & objective 4) Scope and types 5) Development of social survey in India Transaction Methodology : Classroom Teaching and survey	15
IV	Research Project	1) Introduction 2) Objects of research report 3) Characteristics	15

		4) Content of the report 5) Importance of report Transaction Methodology : Report writing	
--	--	--	--

Suggested Readings:

1. M.H. Gopal, An Introduction to Research procedure in Social Sciences, (Asia Publications, 1970)
2. J A Khan Research Methodology (APH Publications, New Delhi, 2007)
3. American Marketing Society, Technique of Marketing Research, Mc Graw Hill, New York 1937.
4. John w. Best -Research in Education Prentice Hall of India, 1963,P.6

SEMESTER IV DSC (DEF 401) International Law (With Effect from June 2020) (Credit 4)

Course Objectives:

- 1) Understand the meaning, nature and scope of international Law,
- 2) Analyze the purpose and functions of international Law

Learning Outcomes:

At the end of the course, the student will be able to:

- 1) Student can give the judiciary solutions on international conflicts.

Unit	Topic	Sub-Topic	Lectures
I	Introduction	1) Definition & Scope of International Law 2) Nature of International Law 3) International Law is a Weak Law 4) Differences between Public & Private International Law Transaction Methodology : Classroom teaching	15
II	Sources of International Law	1) International Customs 2) International Treaties 3) General Principles of Law 4) Judicial Decisions & Juristic Works 5) Resolutions of General Assembly Transaction Methodology : Classroom teaching	15
III	Recognition, Law of the Sea	1) Meaning & Theories of Recognition 2) De Facto & De Jure Recognition 3) Express, Implied & Conditional Recognition 4) Withdrawal & Retroactivity of Recognition 5) Territorial Sea, Contiguous Zone, Continental Shelf & Exclusive Economic Zone, High Seas	15

		Transaction Methodology : Classroom teaching	
IV	International Organizations	1) The United Nations & its Organs 2) The International Court of Justice 3) International Criminal Court 4) International Maritime Organization.	15
		Transaction Methodology : Classroom teaching	

Suggested Readings:

- 1) Oppenheim, *International Law*, Biblio Bazaar, LIC, 2010
- 2) James Crawford Brownlie, *Principles of International Law*, Oxford University Press, 2013
- 3) Starke, *Introduction to International Law*, Oxford University Press, 2013
- 4) Shaw, *International Law*, Cambridge University Press, 2008 (6th Edn)
- 5) A. Boyle & C. Chinkin, *The Making of International Law, Foundations of Public International Law*, Oxford University Press, 2007
- 6) R. P. Dhokalia, *The Codification of Public International Law*, United Kingdom: Manchester University Press, 1970
- 7) Mark Villiger, "The Factual Framework: Codification in Past and Present", in *Customary International Law and Treaties*, Mark Villiger, pp.63-113, The Netherlands: MartinusNijhoff, 1985
- 8) S.K. Kapoor, *International Law, Human Rights*, Central Law Agency, 2009
- 9) Brownlie, *International Law and the Use of Force by States*, Oxford: Clarendon Press, 1991
- 10) H.O. Agarwal, *International Law & Human Rights*, Central Law Agency 1st Ed. (Rep) 2014

DSC (DEF 402) Human Security (With Effect from June 2020) (Credit 4)

Course Objectives:

- 1) Understand the importance of value of human security.
- 2) Acknowledge the key structure of human security.

Learning Outcomes:

At the end of the course, the student will be able to:

- 1) Students can perform duty in human rights unit.
- 2) Students can raise the human security issues for society welfare.

Unit	Topic	Sub-Topic	Lectures
1	Introduction	a) Meaning, Concept, Scope, Importance b) Types of human security c) United Nations and human security d) Human Security in Theory and Practice e) Legal provisions in India Transaction Methodology : Classroom teaching	15
2	Issues	a) Implementation of human rights b) Unbalanced economic globalization leads to economic crisis and poverty.	15

		<p>c) Unbalanced use of natural resources results in destruction of the</p> <p>d) Environment, pollution and famine.</p> <p>e) Unbalanced provision of basic health services results in the spread of pandemics.</p> <p>f) Unbalanced security measures, declining civic responsibility, results.</p> <p>Transaction Methodology : Classroom teaching</p>	
3	Challenges	<p>a) Monopolist ideology</p> <p>b) Genocide - Economic, Political, Social, Psychological</p> <p>c) Human Trafficking, Terrorism,</p> <p>d) Urban violence and, ultimately,</p> <p>e) Coordination of governments.</p> <p>Transaction Methodology : Classroom teaching</p>	15
4	Responses	<p>a) Basic needs and basic human rights</p> <p>b) Balance between needs and resources,</p> <p>c) Rights and duties, and order and tolerance</p> <p>d) Judiciary system,</p> <p>e) Freedom from fear and anxiety</p> <p>Transaction Methodology : Classroom teaching</p>	15

Suggested Readings:

- 1) Shahrbanou Tadjbakhsh, Anuradha Chenoy, Human Security: Concepts and implications Routledge, 12-Feb-2007
- 2) Georg Frerks, Berma Klein Goldewijk, Human Security and International Insecurity Wageningen Academic Publishers, 08-Dec-2006
- 3) Sangmin Bae, Makoto Maruyama, Human Security, Changing States and Global Responses: Institutions and Practices, Routledge, 05-Dec-2014
- 4) Annamarie Bindenagel Šehovic, Reimagining State and Human Security Beyond Borders, Springer, 11- Jan-2018
- 7) <https://www.un.org/humansecurity/wp-content/uploads/2017/10/h2.pdf>

DSC (DEF 403)

Role of Science and Technology in National Security

(With Effect from June 2020)

(Credit 4)

Course Objectives:

- 1) To understand the Role of Science and technology in national security.
- 2) To understand Application of dual use technologies

Learning Outcomes:

At the end of the course, the student will be able to:

- 1) To find out the solution to the technological challenges
- 2) To develop the thoughts about military and civil technology

Unit	Topic	Sub-Topic	Lectures
I	Introduction	<p>a) Meaning , definition, concept, history of development</p> <p>b) Impact of Science and technology on society and warfare</p> <p>c) Technology development- indigenous mean, public and private sectors, transfer of technology - political, military and economic impact, advantages of foreign collaboration and joint military technological venture.</p> <p>Transaction Methodology : Classroom teaching, documentary</p>	15
II	Transfer of Technology	<p>a) International interdependence</p> <p>b) Role of multinational corporations</p> <p>c) Military technology</p> <p>Small arms technology, armored Vehicles Technology, Submarines and Aircraft Carrier, Aircraft, Rocket, Missile and Space Vehicle.</p> <p>Transaction Methodology : Classroom teaching, documentary</p>	15
III	Application of Dual Use Technologies	<p>a) Nuclear technology,</p> <p>b) Space technology,</p> <p>c) Artificial intelligence,</p> <p>d) Drown technology ,</p> <p>e) Cyber security in defence installations,</p> <p>Transaction Methodology : Classroom teaching, Guest lecture</p>	15
IV	The relationship of science and technology to national security	<p>a) Impact of information technology</p> <p>b) Issues of mobilization of resources during war and peace</p> <p>c) Technology and foreign policy diplomacy, national interest</p> <p>d) New world order and Technology emerging challenges</p> <p>Transaction Methodology : Classroom teaching, Panel discussion</p>	15

Suggested Readings:

- 1) Ilaria Anna Colussi, “Biolaw and ‘the Dual-Use Dilemma’: The Freedom of Scientific Research in Relationship with ‘Traditional’ and Emerging Sciences and Technologies”, Erick ValdésJuan Alberto Lecaros (edited) Biolaw and Policy in the Twenty-First Century, (publication: springer link, 2015) 239-255
- 2) Cung Vu, “Science, Technology and Security Research: the potential role of think tanks like rsis”, policy report, S. Rajaratnam School of International Studies (RSIS) https://www.rsis.edu.sg/wp-content/uploads/2018/02/PR180220_Science-Technology-and-Security-Research.pdf
- 3) Steven E. Miller & Scott D. Sagan, Nuclear power without nuclear proliferation? <https://www.mitpressjournals.org/doi/pdfplus/10.1162/daed.2009.138.4.7>
- 4) Jasbir R.K, Handbook of military science and Armament Technology, Natraj Publications, Dehradun. 1987.
- 5) Johan Erickson (Ed.) The Military Technical Revolution: Its Impact on strategic and Foreign Policy, Frederick A Praeger, New York. 1966.
- 6) Macksey, Kenneth, Technology in War: The impact of Science on weapon development and modern battle, Prentice Hall, New York. 1986.
- 7) Mann T.S., Transfer and Technology, Himalaya Publications House, Bombay. 1982.
- 8) Rajan, Y. S. Empowering India (with Economic Business & Technological strengths 4yfor the twenty First Century), Har Anand Publications, New Delhi, 2001.
- 9) Rahman, A. Science Technology and Society, People’s Publishing House, New Delhi. 1972.

GE (DEF 404) India’s Energy Security

(With Effect from June 2020)

(Credit 4)

Course Objectives:

- 1) To understand energy resources in India.
- 2) To understand the energy security of India.

Learning Outcomes: At the end of the course, the student will be able to:

- 1) Explain access, geographic distribution and use of fossil and renewable energy resources.
- 2) Manage and evaluate analytical tools and indicators related to energy security.

Unit	Topic	Sub-Topic	Lectures
I	Introduction	a) Meaning, Definition, Concept b) Importance of energy c) Available energy resources in India d) Energy history in India e) Development and energy factor Transaction Methodology : Classroom teaching	15
II	Energy sector	a) Coal - types and market b) Oil and natural gas - supply issues c) Uranium, thorium and plutonium - research, need,	15

		plants, utility d) Solar energy vision of India e) Electricity Transaction Methodology : Classroom teaching, Discussion	
III	Energy Policy, Agreements and Co-operation	a) Long-term energy security b) Short-term energy security c) Energy Organization and India's vision d) Cooperation with West Asia, Central Asian Republics and other nations. e) Diplomacy and great games effects. Transaction Methodology : Classroom teaching, Documentary, Guest Lecture	15
IV	Challenges	a) Infrastructure and skill related challenges b) Economic challenges c) External challenges d) Strategic challenges e) Environment challenges f) Sea pirates, natural calamity Transaction Methodology : Classroom teaching, Expert's lecture	15

Suggested Readings:

- 1 “Powering lives. Empowering Nation”, Annual report 2018-2019, Ministry of Power, Government of India, 2019
- 2 Lal, Marie, The geopolitics of Energy in South Asia, Institute of Southeast Asian Studies, Singapore, 2008.
- 3 Leena, Energy Infrastructure: Priorities, Constraints and Strategies for India, Oxford, India, 2009.
- 4 Sanjay Deshpande, The New Great Game in Central Asia, in “Dynamics of Central Asia: Issues and Challenges”, G.B. Books New Delhi and Centre for Central Eurasian Studies, University of Mumbai, 2017.
- 5 Tanaji Pol, India-Central Asia Relations: Challenges and Opportunities, Dynamics of Central Asia: Issues and Challenges, (ed.) Dr. Sanjay Deshpande, G.B. Books New Delhi and Centre for Central Eurasian Studies, University of Mumbai, 2017.
- 6 Sovacool K. Benjamin, the Routledge Handbook of Energy Security. Singapore, 2011.
- 7 S. Rajeev, India's Energy Security, IIMB WORKING PAPER NO. 2010-02-30S Bangalore, 2010.
- 8 Munasinghe M. and Meier P., Energy Policy Analysis and Modeling, Cambridge University Press 1993.
- 9 Samuelson P. A. and William D. N., Economics, 14th edition, McGraw Hill 1992.
- 10 Thuesen G. J. and Fabrycky W. J., Engineering Economy, Ninth Edition, Prentice Hall India 2001.

- 11 Sanjay Deshpande and Chandrakant Yatnoor, Re-Emerging Indo-Russia Relations in the New World Order, G.B.Books Publication New Delhi, 2019.
- 12 Sanjay Deshpande, 19th India-Russia Summit: Assessing the Strategic Partnership, G.B.Books Publication New Delhi, 2019.
- 13 Sanjay Deshpande, Tanaji Pol, Indo Russian Diplomatic Relations 70 Years of Unfailing Friendship, University of Mumbai Publication, Mumbai, 2017.
- 14 Central Eurasian Journal
- 15 www.eurasia.net
- 16 <https://www.iea.org/>
- 17 <http://petroleum.nic.in/>
- 18 <https://www.npcil.nic.in/index.aspx>
- 19 <https://www.world-nuclear.org/information-library/country-profiles/countries-g-n/india.aspx>

DSE (DEF 405) Dissertation: (Project Writing)

(With Effect from June 2020)

(Credit 4)

Course Objectives:

- 1) To understand basic techniques of research methods.
- 2) To understand the research subject issues.

Learning Outcomes:

At the end of the course, the student will be able to:

- 1) Student can make a professional research projects
- 2) Students can join in think tank.

Unit	Topic	Sub-Topic	Lectures
I	Introduction	a) Research : Mean, definition, scope b) Importance of research c) Types of research d) Limitations e) Challenges in research f) Survey methods in Social Science g) Techniques of data analysis Transaction Methodology : Classroom teaching, Expert's lecture, Documentary	15
II	Research Pattern and Methodology	a) Introduction b) Research methodology c) Research objectives d) Hypothesis	15

		e) Fact findings f) Data analysis g) Conclusion h) Reference Transaction Methodology : Classroom teaching, Expert's lecture, ICT	
III	Project making	a) Chapter design b) Project Writing Skill c) Approaches d) Society utility e) Internet searching techniques Transaction Methodology : Library and Field visits	15
IV	Presentation	a) Project Presentation b) Analysis c) Discussion Transaction Methodology : Project presentation	15

Suggested Readings:

- 1) Murray, Neil, Hughes, Geraldine, Writing Up Your University Assignments And Research Projects: A practical handbook, McGraw-Hill Education (UK), 01-Apr-2008.
- 2) Tom Clark, Alan Bryman, How to Do Your Social Research Project Or Dissertation, Oxford University Press, 2019.
- 3) Richard E. Davies, Handbook for Doctor of Ministry Projects: An Approach to Structured Observation of Ministry, University Press of America, 1984.
- 4) Mark Garner, Claire Wagner, Barbara Kawulich, **Teaching Research Methods in the Social Sciences**, Routledge, 01-Apr-2016.

**Board of Studies (BOS) Panel for
CBCS Autonomous Structure for Post Graduate Second Year (Defence and
Strategic Studies)**

Sr. No	Name of Members	Designation
1	Dr. L. P. Wagh	Chairman
2	Lt. Gen. (Dr.) D. B. Shekatkar	Member
3	Dr. S. P. Badgajar	Member
4	Prof. V. S. Khare	Member
5	Dr. L. A. Khan	Member
6	Dr. D. G. Vispute	Member
7	Lt. (Dr.) Y. S. Borse	Member